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Responding to the evidence: Synthetic phonics in action: Final report: Keys to unlocking the future 2012-2013

Deslea Konza

Edith Cowan University

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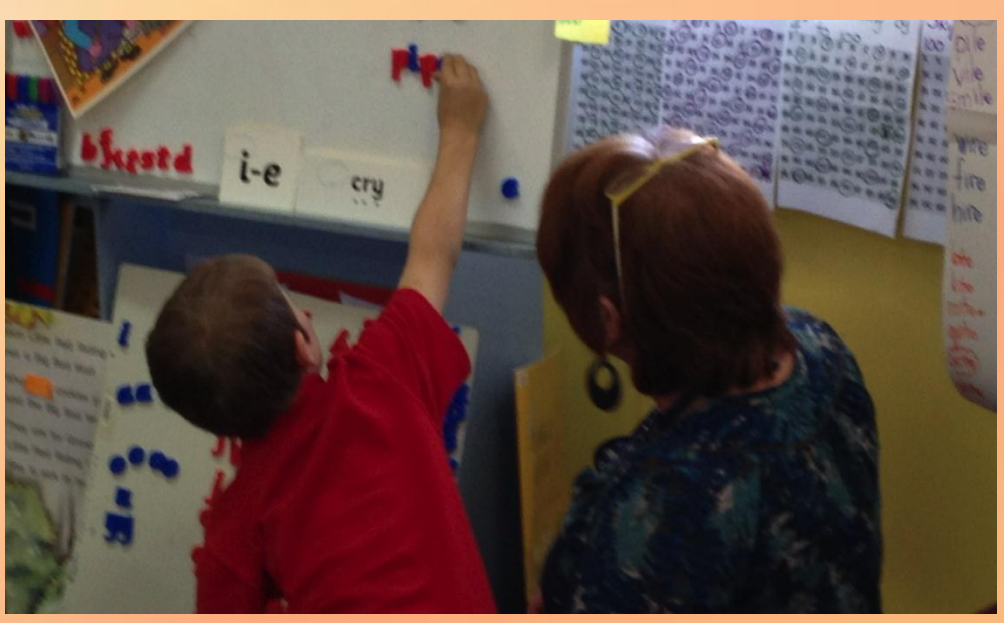
Responding to the Evidence: Synthetic Phonics in Action

2012-2013



Keys to Unlocking the Future

Government of South Australia

Fogarty Foundation
Creating opportunity, realising potential.

Final Report prepared by

Associate Professor Deslea Konza

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Project team

ECU Researcher: Deslea Konza

ECU Project Manager: Helen Dixon

ECU statistical support: Dr Leanne Fried

YMN Director: Roger Nottage

YMN Manager: Denise Higgins

Participating schools

Airdale PS

Auburn PS

Blyth PS

Burra CS

Clare PS

Minlaton PS

Moonta PS

Owen PS

Port Pirie West PS

Risdon Park PS

Solomontown PS

Wallaroo Mines PS

Dedication

This report is dedicated to the memory of Meva Heading, with whom we were privileged to work throughout 2012.

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INTRODUCTION

This project aimed to develop the capacity of primary teachers and School Support Officers (SSOs) to deliver a synthetic phonics program to beginning and struggling readers in 12 primary schools in the Yorke and Mid North region of South Australia. It was designed to 'value-add' to the Principals as Literacy Leaders (PALL) project which had been implemented in the region over the previous three years, and to build a critical mass of skilled teachers in a region that usually scored below average in reading on NAPLAN assessments.

A synthetic phonics program refers to one that teaches the *alphabetic code* or *phonics* - the letter-sound relationships that underpin the English language – explicitly and systematically, and in an order that promotes blending, as recommended by all major reports into literacy development over the past 15 years (DEST, 2005; Johnson & Watson, 2003; Johnson & Watson, 2005; NICHHD, 2000; Rose, 2006). While most primary schools now teach phonics as part of their reading program, many do it in an embedded or analytic manner. In a synthetic phonics approach, the letter-sounds are systematically and explicitly taught in an order that promotes blending or *synthesising*, and there is a very early emphasis on this important component of the reading process.

The view that teaching phonics systematically is boring and reduces motivation to read in young children is largely what prompted the move away from explicit teaching of the alphabetic code. Different ideological views led to what has been termed the 'literacy wars', which have permeated the field of literacy instruction for the past four decades. As a result, many universities have not included the development of systematic and explicit teaching in their teacher education programs, and some still do not address these elements, thus many teachers have not been taught how to teach in the way that a synthetic phonics program requires. As a result, many students are not developing decoding skills to the level of automaticity required to understand what they read.

This project therefore aimed to develop in both teachers and SSOs a greater theoretical understanding of the reading process, and the skills to teach the component skills of reading in an explicit and systematic way. It also aimed to monitor the effectiveness of the program in terms of student progress.

Research Aims and Questions

To *build understanding* of the key elements of the reading process, and how these skills are developed in beginning reading

1. To what extent did participant knowledge of reading development and effective reading instruction develop as a result of the professional learning program?
2. What specific elements of the professional learning program were effective in enhancing participant knowledge of reading and evidence-based reading instruction?

To *support the development of strategies* associated with a synthetic phonics approach to teaching reading

3. To what extent did participants develop effective pedagogies, based on a synthetic phonics approach, as a result of the professional learning program?

To improve reading outcomes of participating students

4. To what extent have the early reading outcomes of participating students changed as a result of participant professional development and support?
5. How have students responded to key elements of the synthetic phonics approach?

PROJECT COMPONENTS

Professional learning days

Six professional learning (PL) days were conducted throughout the year, and located in different regional centres.

There were some common elements on each day. In addition to the literacy input, each day included a session on cultural competence jointly conducted by the Aboriginal Education Coordinator and the Aboriginal Community Education Manager. These sessions were included partly because of the numbers of Aboriginal students included in the project and the funding provided through the Aboriginal Literacy Initiative, but also because all those involved in the development of the project believed that such components should be an integral part of all professional learning. Workshop discussions centred on understanding both the visible and the invisible aspects of culture that guide our values, beliefs and behaviour; using appropriate and respectful language; how the 'loss of lands' affects Aboriginal peoples; websites and resources that are available to support teaching of all students; how language registers can include or exclude Aboriginal students; and how individual 'mental models' lead to assumptions and conclusions that may not be valid. This aspect of the project was evaluated separately from the reading components.

Other regional personnel also participated in delivery of the professional learning. Speech pathologist Julia Lloyd-Jones presented sessions on oral language development, conducted follow-up assessments of students with low levels of phonological awareness, and made some school visits. Assistant Regional Director Roger Nottage attended a number of sessions, initiated a participant survey midway through the project, and provided feedback from a regional perspective.

Day 1

A considerable proportion of the first day was spent explaining the aims and parameters of the project, the roles and responsibilities of researchers and participants, and the ethics requirements. Demographic and other preliminary data were collected. This was followed by an overview of the 'Big Six' (Konza, 2010), a framework that links the six essential components required for meaningful reading to develop.

Day 2

The second day provided explanations and demonstrations of the assessment instruments (Oral Language Assessment, Screen of Phonological Skills, and the Alphacheck) that would be used to monitor student progress. Between the second and third PL days, teachers and SSOs were asked to administer the three assessments to all individual students for whom parental consent had been

gained and return the results to ECU for data entry and graphing. One participant developed a summary sheet for the results, which greatly simplified the data recording process.

The synthetic phonics instructional sequence and the use of decodable texts within the program were also explained. A workshop on oral language development, which underpins all literacy achievement, was conducted in the afternoon session.

Day 3

Graphs of their own students' results were provided to all participants at the beginning of the third PL day. Overall trends apparent in the data were discussed before the teachers and SSOs explored their own students' results in more detail. This led to a discussion of how students could be grouped for instruction, in addition to strategies for managing groups. A demonstration of the synthetic phonics teaching sequence was presented, and a detailed 'script' that outlined the important components of the sequence was distributed.

Day 4

Further input on oral language was provided by a regional Speech Pathologist on the fourth PL day. This was followed by a component which became an essential part of subsequent PL days in this and other projects: a "What's working? What's not?" discussion with all participants, which was very helpful in informing future PL days. Feedback was also provided on classroom visits, and further strategies provided for students who were ready for more advanced phonic skills.

Day 5

The fifth PL day began with a local consultant presenting the results of a participant survey conducted by regional personnel. Although only about half of the participants had responded at that time, the survey provided encouraging feedback about perceptions of student progress and elements of the project that were working well. This added to the group session on "What's working? What's not?"

A discussion of students who had been assessed for Rapid Automatised Naming (RAN) difficulties was also included on this day. The ability to rapidly retrieve linguistic information from the brain, which is assessed by tasks such as naming a series of colours or numerals as quickly as possible, is also necessary for fluent reading, as a competent reader accesses sight words and other linguistic information very quickly. Students who have both phonological and RAN difficulties are often referred to as having a 'double deficit', and are likely to have increased difficulty learning to read. Some general strategies to assist development of these abilities were presented.

Participants at one school had produced a short DVD of the synthetic phonics cycle in action in two classrooms and in an individual intervention program. This was originally produced to support the validation process that was taking place at their school, but the potential for wider use of such a video was clear. The DVD was presented to the group as one way in which successful practices that had been introduced throughout the project could be disseminated. There was enthusiasm on the part of regional leaders for the production of a longer video that explained the synthetic phonics cycle and captured 'best practice' as demonstrated by participants. Funding was sourced from both the region and ECU for this to be developed. Most participants were happy to consent to their

classroom practice to be filmed for possible inclusion. The production of this DVD and another for promotional purposes are discussed later in this report.

Day 6

The focus of the final PL day was analysis of student progress. All participants received the pre- and post results for their individual classes in the form of class graphs. There was discussion of particular successes, and participants were invited to annotate the graphs with relevant information that would inform the final analysis. For example, students with high levels of absenteeism were identified, as were other factors that may help explain individual results.

Key points about the implementation of a synthetic phonics program and other important components of the year's work were then highlighted. A scope and sequence for more complex letter-sound knowledge appropriate for Years 4 and 5 was distributed, and further guidelines provided to support the next stage of teaching. Participants completed the post-project Survey of Literacy Knowledge and Beliefs, and a Project Evaluation Survey, before the day concluded with a celebration of project outcomes.

Resources

Each professional learning day included the distribution of a number of resources and handouts. The most significant of these in terms of the project's aims are briefly described below.

Synthetic phonics instructional sequence

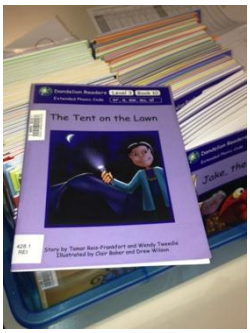
A script for teaching a new letter-sound using a synthetic phonics sequence was provided and demonstrated for all participants. This was designed to be a major reference document for the participants (see Appendix A).

Scope and sequence for synthetic phonics instruction K-4

This resource provided a sequence for teaching phonological and phonemic skills and the introduction of letter-sound knowledge and high frequency words from Kindergarten through to Year 4. It included more complex letter-sound knowledge; alternative spellings (for example oo [gloomy], o [movie], ou [coupon], ew [blew], ui [suitcase], ue [gruesome]); prefixes and suffixes; most common Greek and Latin roots; homophones; spelling rules; and lists of exemplar words (see Appendix B).

Dandelion readers

Each school received a complete set of Dandelion Readers to support early blending skills. The set comprised 14 *Launchers,* which incorporate very early letter-sound knowledge, 40 *Initial Phonics Code* readers, and 42 *Extended Phonics Code* readers, a total of 96 readers.



Time Timer Clock

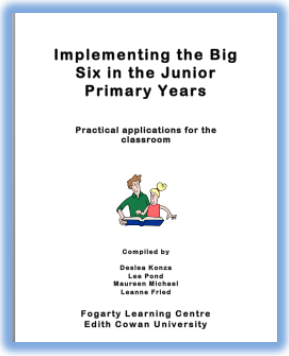
Each school also received a Time Timer, which provides a very visible indication of the time allocated for a particular activity. The red arc reduces in size as time passes. It can be used in conjunction with the *YOYO (You're On Your Own)* group management strategy, implementation details of which were also distributed.

Letters and Sounds CD

Letters and Sounds is a synthetic phonics program developed by the UK Office of Standards in Education in response to the 2006 Review into Early Reading by Sir Jim Rose. The CD, which contained the recommended sequence of letter-sound knowledge, teaching resources and video clips demonstrating different aspects of the program, was originally compiled by the WA DET Centre for inclusive Schooling and was provided to each participant as a useful resource.

Strategies for implementing the Big Six

This resource, developed by the Fogarty Learning Centre, includes teaching strategies aligned with each of the Big Six elements of reading.



School visits

Each school received four or five visits throughout the year by the researcher from Edith Cowan University, with each visit lasting between 40-60 minutes. In most cases, the researcher was invited into the participating teachers' classrooms, and some schools made arrangements for the teacher and researcher to meet immediately afterwards for feedback. On some occasions, schools requested a meeting during this time with one or more teachers.

This component proved to be invaluable for the researcher in determining the extent to which the project was implemented, how effective the professional learning sessions had been, and any strategies that had been misunderstood or misinterpreted.

METHODOLOGY

Participants

With the assistance of regional SA DECD personnel, teachers and student support officers (SSOs) of junior primary classes were recruited from 12 schools in the Yorke and Mid North Region of South Australia. Aboriginal Education Teachers (AETs) appointed to four of the schools, a Reading Support Teacher, one school principal and two deputy principals also attended the professional learning days. A number of other regional leaders and consultants attended different days to demonstrate regional support for the project.

Table 1: *Adult participants*

Classroom Teachers	Student Support Officers	Reading Support Teachers	Aboriginal Education Teachers	Principal/ Deputy	**Total**
21	9	1	4	3	**38**

Initially, 403 students were tested, with 377 students completing most pre- and post-project assessments. All students entering Reception (the first year of formal schooling in SA) and Year 1, whose parents gave consent, were involved. Some Year 2 students who were not developing early reading skills, or who were in combined classes in smaller schools, were also included. In four schools, Aboriginal students from Reception to Year 4 also attended support classes throughout the week, and so these Year 3 and 4 Aboriginal students were also involved. Thus the age of the students ranged from 5 to 9 years, with the majority aged 5-7 years.

Table 2: S*tudent participants*

Year level	Aboriginal	Other	Total
Reception	10	164	174
Year 1	17	119	136
Year 2	12	44	56
Year 3	9		9
Year 4	2		2
		Total number of participating students	377

Data collection instruments

Oral language assessment (Crevola and Vineis, 2004)

This instrument requires students to repeat a series of 15 sentences of increasing complexity, thus providing a measure of their receptive language. As students repeat the sentences, the assessor records any omissions, substitutions or expansions of words that occur as the sentences become longer and more complex. By the end of kindergarten, children should score at least 7. By mid Year 1, students should be able to repeat all 15 sentences accurately. Students who score between 0 and 5 would have great difficulty following the most basic instructions or stories read to them in class (see Appendix C).

Screen of Phonological Awareness (SPA) (Mallen, 2003)

Phonological skills such as awareness of the rhythm, rhyme and individual sounds within words have been strongly linked to the development of reading and spelling. The SPA was designed to screen children aged up to 6 years to identify those who may be at risk because of their phonological skills. This instrument was originally included when the study was to be confined to students in their Reception year, on the understanding that this was the assessment recommended by SA DECD. Percentile ranks are provided for children aged from 4 years to 5 years and 11 months, although the instrument can also be used for older children when poor phonological skills are suspected (see Appendix D).

Alphacheck (Konza, 2012)

The Alphacheck assesses children's knowledge of letter names, the individual letter sounds, digraphs, and common letter strings. It also assesses children's ability to use this knowledge in reading words of increasing complexity. A descriptor of the phonic knowledge being assessed appears at the bottom of each column of items. This is to build the literacy language of teachers, many of whom have never been taught terminology such as digraph, trigraph, grapheme, etc. (see Appendix E).

Survey of Literacy Knowledge and Beliefs

Although the project focus was development of the explicit teaching strategies associated with a synthetic phonics approach, these skills are best developed when there is a broader understanding of how the component skills come together in skilled reading. This survey contained 4 items that assessed knowledge of terminology; 21 items that investigated changes in participants' understanding of the reading process and how it should be taught; two items that explored the *level of confidence* they had in understanding and teaching the reading process; and two items that explored their metalinguistic awareness of their own phonemic skills. Survey responses were possible along a five-point scale: strongly disagree, disagree, not sure, agree and strongly agree. The most correct answers scored five, and the least correct scored one point, with 'not sure' scoring three. Some questions were phrased so that *strongly disagree* was the most correct response.

Respondents were asked to use a personal code or identifier such as a pet's name on their surveys. This allowed them to remain anonymous, and thus reduce any anxiety associated with assessment of their knowledge, while still allowing pre- and post surveys to be matched. A list of the code names was provided to all participants when they were completing the post-survey to prompt them of the names they had used. A total of 32 participants completed most sections of the pre- and post surveys (see Appendix F).

Project Evaluation Survey

A total of 32 participants completed a project evaluation survey at the final meeting in November 2012, although not all participants completed every item. This explored the extent to which participants believed their knowledge and practice of effective reading instruction had developed, and their views on the usefulness of different project components. The survey also included some open-ended questions, which allowed for further feedback on each major component of the project, and suggestions for improvement (see Appendix G).

***Reading levels as indicators of success**

There was some discussion among members of both the ECU and YMN teams about collecting reading levels as an indicator of student progress. The rationale for our decision not to collect that information as part of the study is too lengthy to report here, but is included as Appendix H.

Summary of data sources and analyses

The quantitative and qualitative methods used to collect and analyse data are summarised in Table 3.

Table 3*: Summary of research questions, data sources and analyses*

Research questions	Data sources	Data analysis
1. To what extent did participant knowledge of reading development and effective reading instruction change as a result of the professional learning program?	• Pre- and post surveys of participant knowledge and beliefs about reading development and effective early literacy instruction • Project Evaluation Survey	• Paired sample t-tests; effect sizes • Descriptive statistics
2. What specific elements of the professional learning program were effective in enhancing participant knowledge of reading and evidence-based reading instruction?	• Project Evaluation Survey	• Descriptive statistics
3. To what extent did participants develop effective pedagogies, based on a synthetic phonics approach, as a result of the professional learning program?	• Classroom observations • Project Evaluation Survey	• Descriptive analysis • Descriptive statistics
4. To what extent did the early reading outcomes of students change as a result of the professional learning program?	• Pre- and post-scores using Crevola & Vineis' Oral Language Assessment • Pre- and post-scores of phonological skills using SPA • Pre- and post-scores of alphabetic knowledge using Alphacheck	• Paired sample t-tests; effect sizes • Paired sample t-tests; effect sizes • Paired sample t-tests; effect sizes
5. How did students respond to key elements of the synthetic phonics approach?	• Informal teacher and student interviews • Classroom observations	• Descriptive analysis • Descriptive analysis

PROJECT OUTCOMES: TEACHERS AND STUDENT SUPPORT OFFICERS

The outcomes of this project are presented as responses to each research question. Results relating to adult participants in terms of their literacy knowledge and beliefs, and their views of the project, are discussed before presentation of the outcomes for the 377 students involved.

1. To what extent did participant knowledge of reading development and effective reading instruction change as a result of the professional learning program?

Growth in teacher and SSO literacy knowledge of reading and effective instruction was evaluated through pre- and post project surveys. The perceptions of the participants regarding their professional learning were also evaluated through their completion of the Project Evaluation Survey.

A total of 30 participants (22 teachers and eight SSOs) completed both pre- and post-project Knowledge and Beliefs surveys (although not all items were competed by each respondent). Responses to items in this survey reflected participants' underlying beliefs about the reading process, and how reading should be taught, and whether or not involvement in the project resulted

in participants' understanding of the reading process becoming more closely aligned with the research evidence.

The graphs in this section present the results for the 21 items that tapped into participants' overall understanding of the reading process and how it should be taught. Results for teachers (including consultants and leaders) and SSOs are presented separately, and are most easily interpreted if the reader views the survey (see Appendix F) simultaneously. As an example, item 6 asked respondents to indicate their agreement with the statement, "Books with predictable text are useful for students to practise early reading skills like blending." For this item, 'strongly disagree' would be the most correct response, because when students 'read' books with predictable text, they are in most cases remembering the common stem or sentence pattern, and filling in the missing words by looking at the pictures. This does not promote the idea that reading is about examining the words, and blending sounds together to work out unknown words, thus it does not represent an evidence-based view. As an additional example, item 7 required a response to the statement "The use of context is more helpful than letter-sound knowledge from the earliest stages of learning to read". The most correct response to this item would also be 'strongly disagree'. Proficient readers do use context to help them understand what they read, but they are only able to do this because they have the automatic word recognition and letter-sound knowledge to read at least 90% of the text, which is required to use context as a strategy. Beginning readers do not have this broad base of knowledge, so in the early stages of learning to read, a focus on developing letter-sound knowledge is the more useful strategy.

Changes in teacher knowledge

Figure 1 presents the pre- and post survey results for the 22 teachers, revealing their average movement towards a more evidence-based view in 18 of the 21 items.

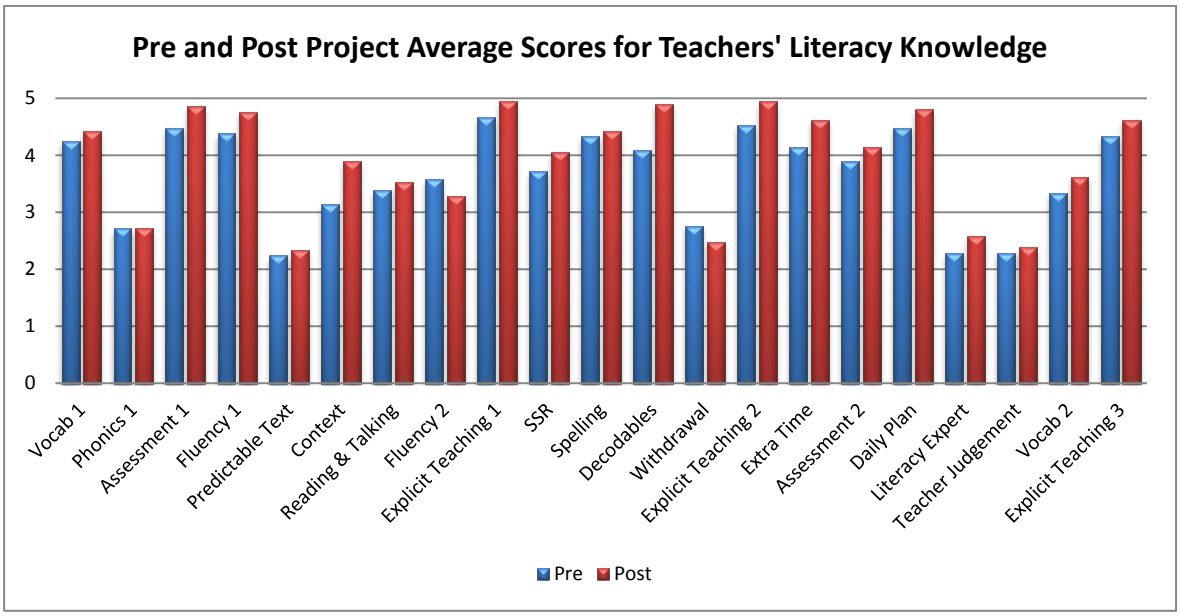


Figure 1: Pre- and post project average scores for teachers' knowledge

Average changes in teachers' beliefs on these items were analysed using a paired sample t-test, as summarised in Table 4. There was a statistically significant difference ($t[21] = 4.18$; $p < 0.0005$) between the pre-intervention scores (mean = 3.68, SD =.31) and the post-intervention scores (mean

= 3.92, SD = .26). Cohen's *d* (.83) indicated a large effect size. **This supports the view that involvement in the project was very successful in building teacher knowledge about reading and the practices that support reading development.**

Table 4*: Statistical summary for growth in teacher knowledge*

Teachers	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	*d*
Growth in literacy knowledge	3.68	3.92	.31	.26	4.18	21	<0.0005	0.83 large effect size

The teachers commenced with a relatively high level of knowledge in the area of explicit teaching, probably because of a recent regional emphasis on this. Further growth occurred throughout the project, with maximum scores being realised in two of the three items relating to this element. Close to maximum scores were also achieved in the items regarding the importance of assessment to guide teaching, and the appropriate use of decodable texts.

Teachers scored on average more poorly in the post-test on two items. The second fluency item asked for their level of agreement with the statement "Fluent readers do not need precise decoding skills as they are able to make meaning from other cues." Fluent readers have a large bank of words that they immediately recognise and can access immediately, and so do not normally need to use their decoding skills, but they must have well-developed decoding skills for the occasional unknown word. In order to become fluent, therefore, well-developed decoding skills must be in place. This difference may have been too subtle for most teachers. Teachers responded more accurately in the post test to the first fluency item, "Students must attain automaticity of the basic elements of reading if they are to be successful in comprehending text".

The second item that was scored more poorly in the post-test related to the efficacy of withdrawal programs. Teachers were asked to rate their agreement with the statement, "Students who are significantly behind in reading benefit from being withdrawn from most literacy lessons for a different program because they are gaining very little from being in the mainstream class". The research evidence supports the view that students who are at least two years behind their peers (often referred to as wave 3 students) benefit from a targeted withdrawal program that meets their individual needs. A negative response to the notion of withdrawal seems to persist, and could reflect the long-held belief that this process negatively affects children's social and emotional well-being. Recent evidence (Lenz et al., 2005; Slavin, 2009a; 2009b; Torgesen et al., 2007) suggests that the progress achieved by students as a result of targeted programs in most cases builds rather than erodes self-esteem, and that time spent out of the classroom building basic skills enhances time spent in the classroom. The negative response to this item could also reflect the emphasis in the PL program on what the class teacher can do to assist the reading development of all students, and the participants' confidence that they could teach all students to read.

Changes in Student Support Officer literacy knowledge

The average results of the eight SSOs who completed both pre- and post tests were analysed separately, and are presented in Figure 2. Because of the small sample size, analysis using a paired

sample t-test was not appropriate, but the means and standard deviations of pre- and post test scores were calculated, as was Cohen's *d* to determine the effect size. Increased mean scores occurred in 15 of the 21 items in the post test. Results are presented in Figure 2 and summarised in Table 5.

The SSOs started from a lower base level of knowledge about reading development, which would be expected. A Cohen's *d* effect size of around 0.4 is considered to be expected growth after teaching for a year. The effect size of 0.43 for the SSOs is only fractionally more than this, but it did occur over only eight months, the duration of the project.

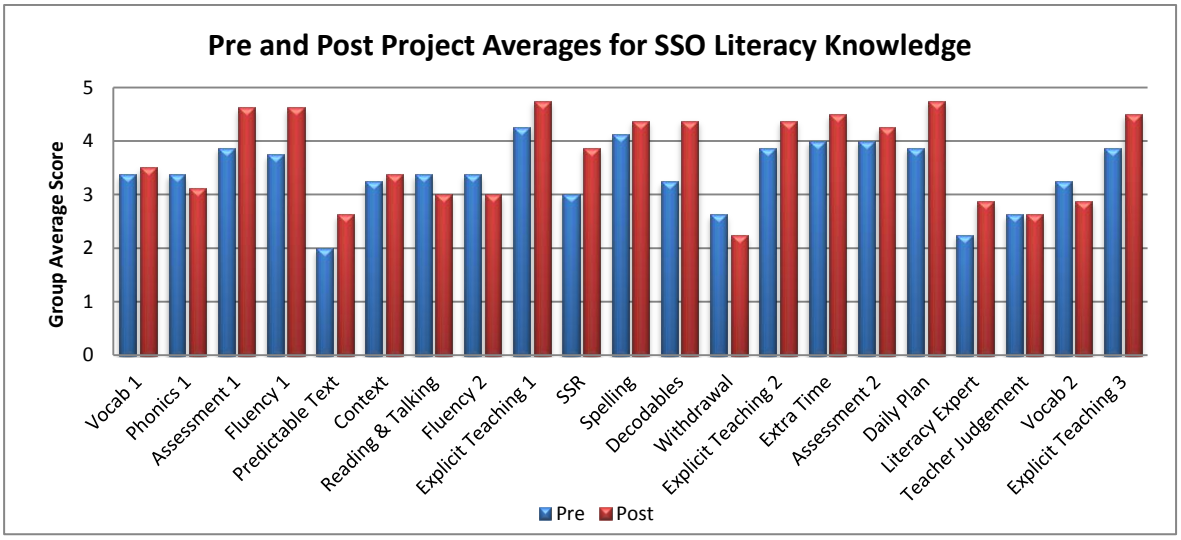


Figure 2: Pre- and post-intervention average scores for Student Support Officers' literacy knowledge

Table 5*: Statistical summary for growth in Student Support Officer knowledge*

SSO mean scores	Pre mean	Post mean	Pre Standard Deviation	Post Standard Deviation	Cohen's *d*
Evidence-based orientation	3.419	3.738	0.625	0.845	0.43

While these results reflect less growth than the teachers, analysis of the individual items revealed strong average growth in their understanding of the core principles of the program: the need for explicit teaching; the use of decodable, rather than predictable texts with beginning readers; the need for struggling students to have more learning time; and the need for daily planning and monitoring. A surprising result was the apparent decline in understanding of the need to teach phonics explicitly and separately (see results of Phonics 1 item in Figure 2). The SSOs *increased* their level of agreement with the statement 'The teaching of phonic elements of reading should always be based within meaningful text', which is inconsistent with synthetic phonics principles, and also inconsistent with the group's stronger agreement with the need for explicit teaching. The term *meaningful text* may have distracted them, as understanding the reading material is clearly the end goal, and so they expressed agreement.

Growth in personal efficacy

Two questions in the Knowledge and Beliefs Survey addressed the participants' personal perceptions of their knowledge growth, and their confidence regarding their ability to teach reading.

The results for teachers and SSOs were combined and are summarised in Table 6. The participants' average responses to these two questions were analysed using a paired sample t-test. There was a statistically significant difference ($t[28] = 5.29$; $p < 0.0001$) between the pre-intervention scores (mean = 3.26, SD =.84) and the post-intervention scores (mean = 4.26, SD = .65). Cohen's *d* (1.33) indicated a very large effect size. This suggests that the participants believed they were much better informed about reading, and their teaching capacity had developed greatly. Their personal perceptions were somewhat more optimistic than the survey results indicated, but were consistent with the fact that their knowledge did develop. This optimism could be the result of the enthusiasm of most participants for their learning, which appeared to be evident throughout the project, and their recognition of the rate of the children's learning.

Table 6: *Statistical summary for participant growth in personal efficacy*

Total participants' mean scores	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Personal efficacy	3.26	4.26	0.84	0.65	5.29	28	<0.0001	1.33

Data gathered through the Project Evaluation Survey

The Project Evaluation Survey confirmed the data gathered through the Survey of Literacy Knowledge and Beliefs. Table 7 reveals that the participants, with an average score of 3.3 out of a possible 4, believed they had learned more about how children learn to a moderate or great extent. They also believed they understood more about the role of oral language in the development of reading to the same extent.

Table 7: *Participant evaluation of knowledge development*

As a result of my participation in the YMN project, I have:	1 Not at all	2 To a slight extent	3 To a moderate extent	4 To a great extent	Mean
Learnt more about how children learn to read.	0	4	15	13	3.3
Understood more about the importance of oral language to the development of reading.	0	4	15	13	3.3

2. What specific elements of the professional learning program were effective in enhancing participant knowledge of reading and evidence-based reading instruction?

Synthetic phonics and feedback on student progress

The Project Evaluation Survey also explored participants' views on the effectiveness of different components of the project. While all elements were seen to be useful to some extent, Table 8 shows that two elements - provision of information about synthetic phonics teaching and feedback on student progress - scored means that were close to the maximum score.

Table 8: *Participant evaluation of project elements*

The following components of the YMN Literacy project have been useful:	1 Not at all	2 To a slight extent	3 To a moderate extent	4 To a great extent	Mean
Input on the Big Six	0	2	6	22	3.7
Input on oral language	0	1	11	20	3.6
Input on synthetic phonics teaching	0	0	4	26	3.9
Class visits	0	9	10	11	3.1
Feedback on student progress	0	0	4	28	3.9
Networking with other teachers	0	3	12	16	3.4
Resources (decodable texts, magnetic letters, Time Timer clock)	0	0	6	24	3.8

These results were confirmed by participants' responses to an open-ended question regarding the most helpful component of the professional learning program. Eighteen different respondents identified the synthetic phonics guidelines as the most helpful element, as exemplified by the following:

Having a program/sequence to follow

The explicit teaching lesson guide on how a lesson should be conducted and the revision of the sound/letters at the end

Prescriptive outline for teaching

Format for explicit instruction

The explicit and structured strategies

The magic sheet. Suggested structure for synthetic phonics teaching. Introduction - Review - Explicit teaching of new phoneme - practice - application - review and conclusion.

Being given a lesson structure to follow each day.

Explicit instruction/order of delivery of lesson

Explicit lesson plan format - the very exact way to present the lesson.

The structure of explicit teaching and literacy block.

Decodable texts

The use of decodable texts was also identified as very helpful, with the following points related to this component:

> Decodable readers - especially for our struggling readers.
>
> Having decodable readers for classes to use - these have been great.
>
> More explicit and use of decodable readers.
>
> The use of decodable readers with intervention students.

While class visits were generally seen to be of moderate assistance, feedback on student progress that occurred as a result of the class visits was seen to be of great assistance.

3. To what extent did participants develop effective pedagogies, based on a synthetic phonics approach, as a result of the professional learning program?

In order to answer this question, data were collected from the Project Evaluation Survey, an additional brief survey conducted by the YMN regional team in Term 3, and through classroom observations by the researcher.

Data gathered through the Project Evaluation Survey

Five items in the Project Evaluation Survey sought participant views on changes in their teaching practice. Because teachers would have been making decisions about assessment instruments, the use of decodable readers, and the order and the pace of letter-sound introduction, only teacher responses have been included in the first four items in Table 9. The final item, marked with a hash symbol (#) also includes SSO responses because they were closely involved in the teaching of small groups, thus a question concerning teaching strategies was also relevant for them.

Table 9: *Participant evaluation of changes in teaching practice*

As a result of my participation in the YMN project, I have:	1 Not at all	2 To a slight extent	3 To a moderate extent	4 To a great extent	Mean
Changed the order in which I teach letter/sounds.	3	4	6	10	3
Increased the pace of teaching letter/sounds.	4	3	4	12	3
Changed reading assessment practices.	5	3	6	10	2.9
Introduced decodable readers to help children practise blending.	1	3	7	14	3.4
#Used more explicit strategies when teaching reading.	0	4	6	20	3.5

As can be seen from Table 9, the use of more explicit teaching strategies was the most significant area of change as a result of involvement in the project. **The greater use of explicit teaching was a positive outcome of the project.**

The introduction of decodable readers was also a positive outcome of the project. The fact that two participants did not introduce these readers could have been due to the fact that the sets of readers were allocated to classrooms, and the four specialist teachers who withdrew Aboriginal students from classes for additional support may not have had access to the readers.

This may also explain the fact that five participants reported that they did not change assessment practices, despite the fact that all students were assessed using the Alphacheck, an instrument devised specifically for this project, and therefore not previously seen by any participants. Assessments for the project were conducted by the class teachers, thus the specialist teachers who withdrew the Aboriginal students, and the three school leaders who participated, may not have changed what they did if they were not involved in student assessments.

Data gathered through the YMN survey

The YMN regional leadership initiated a brief on-line survey after several months of the intervention to gain feedback on project implementation. A total of 24 participants responded, which comprised one school leader, one reading support teacher, three Aboriginal Education Teachers, five SSOs and 14 teachers. Participants were asked to respond to five questions along a four point scale from 'strongly disagree' to 'strongly agree'. The results can be seen in Figure 3.

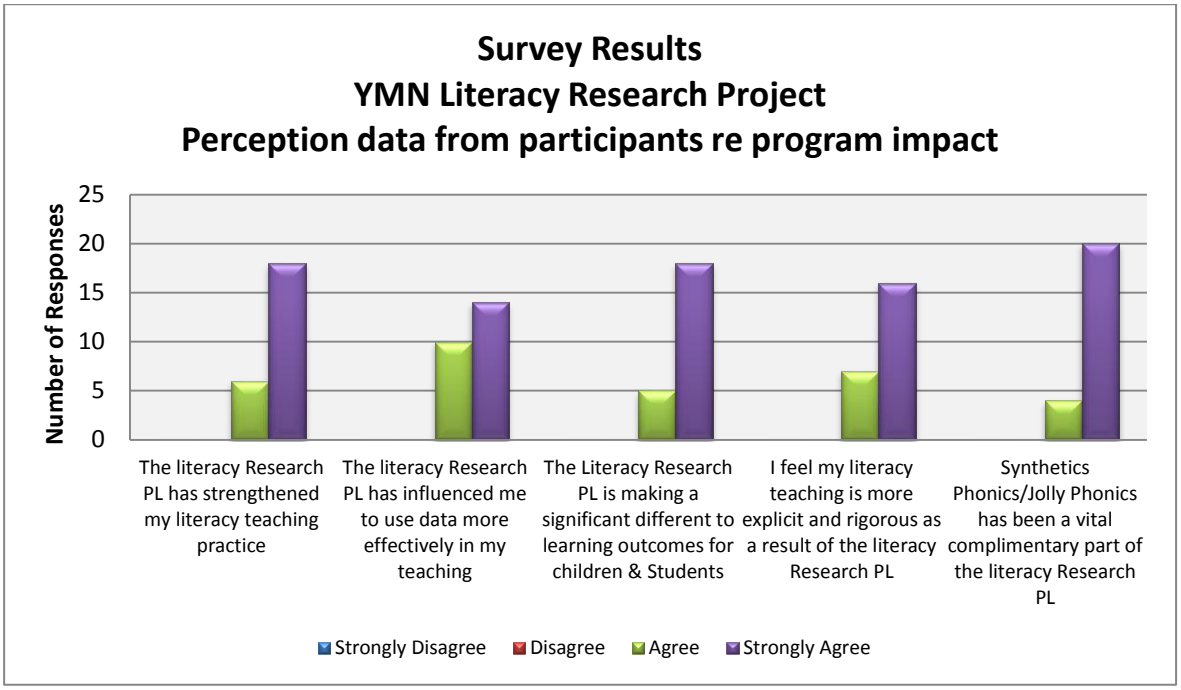


Figure 3: YMN Survey of participant response to project

All respondents either agreed or strongly agreed with each statement, showing a high level of satisfaction with the project at that stage. A more complete survey may have included a broader range of responses, as generally those who are positive take the time to respond. Seven participants took the opportunity to add comments, which are included below:

> As a leader I have found the data collection particularly useful in terms of noticing students' performance for Reception and Year 1 students - especially Aboriginal students scoring very poorly on the different assessments and allowing us to think about what we are doing to support the students.

I think the training was more effective for younger teachers but confirmed practices for more experienced teachers.

The information given to us about phonological awareness has clarified that our PA groups that operate 3 times a week are an effective strategy.

The difference it has made is incredible. The children are so eager to learn.

It has been good to gather the data on the students to know where they are at and where the gaps in their knowledge are. Being a part of the project has helped me with my teaching and has seen improvement with the students learning.

(The strategy is) fun to teach and for students to engage in.

The assessments used have been very useful - data collection has been passed to all teachers with Aboriginal students and our ACEO. All resources have been given to all R-3 teachers. Teachers and the ACEO have used the information for planning with students & carers.

Data gathered through classroom visits

Changes in teaching practice were also evaluated by classroom visits and observation of teaching. It was highly instructive for the researcher to be reminded of the realities of the classroom: the 'busyness'; the need for constant adaptation; the range of social and emotional needs evident amongst the children as well as the range in learning needs; and the level of skill required to orchestrate an engaging and productive day in a junior primary classroom.

The following section outlines teaching points where improvements were noted throughout the year. The importance of classroom observations when trying to change classroom practice cannot be over-emphasised. Observations of actual teaching provided the only means by which some misunderstandings can be identified and clarified. They also identified for the researcher points that had not been explained clearly enough, and so were invaluable in improving further professional learning presentations.

Rate of introduction of new material

The increased rate of introduction of initial letter-sounds is a key point of difference in a synthetic phonics approach and was emphasised in the PL sessions. Classroom observations early in the year revealed that some teachers were maintaining the same rapid rate of introduction when introducing more complex digraphs and letter combinations, and this was causing confusion for most students. The point was clarified in the subsequent PL session, at which some teachers mentioned that it seemed too fast, but they were trying to follow the procedures. This highlighted for the researcher the need to be more explicit about when to slow the pace. After this point, teachers were observed to move more slowly after the single sounds had been taught.

Confusion between the terms 'letters' and 'sounds'

Classroom observations also allowed the researcher to see teaching materials, such as letter charts, that reflected some teacher misunderstandings. For example, in one Reception classroom, a chart displayed the letter '*a*' in upper and lower case formats, surrounded by the words *author, Australia, apple* and *aeroplane.* These words obviously do not all begin with the same *sound* and the chart reflected a lack of clarity on the teacher's part about how letter sounds and names should be taught. This relatively widespread misunderstanding between the terms was confirmed when watching

some reading activities, during which a number of teachers used the two terms almost synonymously, and failed to pick up subsequent errors made by the children.

These observations allowed the researcher to re-emphasise the difference between the two terms in subsequent PL sessions, and although some confusion was still evident in one or two classrooms during later observations, there was an improvement evident in most.

Extended use of four-step blending process

Early classroom observations also revealed that some teachers were continuing to emphasise the four-step blending process demonstrated at the first PL session long after the children needed it. This is unnecessary if words are being called out as soon as the letters appear: slowing down the process is, in fact, likely to reduce motivation for the task. If only some children are able to immediately blend the sounds into words, it is an indication that ability groups need to be organised. This point was clarified, and later observations revealed that teachers were more attuned as to when to modify their demonstrations.

Use of magnetic letters

When children begin using magnetic letters to practise the blending of sounds into words, a limited number of letters should be made available, usually only those that the children need. If children are faced with a large container of letters, as was often observed during initial classroom visits, most time is spent locating the letters required, which wastes time. Similarly, continued use of magnetic letters when students are at the stage of creating sentences is also inappropriate. Magnetic letters are useful to support the blending process. Once children understand that, they should move quite quickly to writing their own words, and certainly by the time they are constructing sentences, they should be writing them rather than sorting through an enormous pile of letters to find those they need. Later visits revealed much more appropriate use of these useful resources.

Monitoring of individual student progress

During early visits, little monitoring of individual student performance was apparent in many classrooms. The luxury of being able to sit and observe children engaged in the business of learning allowed the researcher to note things that admittedly are much harder to see when faced with the many competing demands of a classroom. Individual student whiteboards are a popular and very useful tool, but it is difficult to monitor each child's attempts if the group is larger than about eight students. Many teachers were missing the fact that some children were simply copying the work of others, making consistent errors, or forming letters in quite random ways, which would greatly affect their handwriting once they started connecting letters in cursive writing. And while the children enjoy erasing and starting again for each new word attempted, unless the teacher monitors carefully, attempts disappear before errors are noted. This led to the suggestion that, if the classroom dynamics made monitoring difficult, children should do their exercises on paper at least once a week, so the teacher can collect them and monitor each child's efforts. Improved monitoring was observed in most classrooms as the project progressed.

Distinguishing between copying and encoding

An important component of the instructional cycle in the project was the writing of at least four words each day using recently learned letter-sounds. This was designed as a dictation exercise, to revise the material and provide additional phonological, letter-sound and blending practice as the students encoded the spoken word into print. Early observations revealed that many teachers were

incorporating this into the Application Phase (as suggested), during which students rotated around different circuit activities practising their new skills and knowledge. The words, however, were often written on a central piece of paper at a particular station rather than being dictated. Most students simply copied the list, either using magnetic letters or on paper, some even copying the first letters of each word down the page, then the second letters, and so on. This would not provide either phonological or blending practice; nor in the case of sight words would it help the students see the words as a whole for any length of time.

Observation in another classroom revealed a successful strategy that was passed on and used quite widely from that point on. A capable Year 1 student in an R-1 class was observed reading the list to each group as they rotated. The teacher spent a few minutes going through the lists relevant to each group as the rotations were being organised, ensuring that the selected student for that day could read all words. Discussing this strategy with other teachers allowed for the important distinction between copying and encoding to be further clarified, and a number of teachers were observed using this strategy in later observations.

Maintaining momentum and student engagement

Another commonly observed practice in some classrooms was the use of individual pop sticks with children's names on them in a jar to organise student involvement and to ensure that all children received equal attention. A name was selected, the student called upon, and once that student had contributed, the pop stick was placed in another jar. This can be very effective in some learning activities, but the strategy is not useful in an explicit teaching session, which is designed to be undertaken at a brisk pace, and to be highly interactive. If students know they can be called upon at any time, even if they have just contributed, they are much more accountable in terms of their attention, and engagement increases. If students know they have 'had their turn', they are much more likely to disengage because they know they will not be called on again. The pop stick strategy also greatly reduces the momentum and pace of the lesson. Observation of this practice resulted in a discussion of its purpose, and the types of lesson in which it would be suitable, and was not observed in the explicit teaching sessions after that point.

Supporting SSOs

The contribution of SSOs in most schools is invaluable, and this was the case within the project. In many instances, SSOs possess intuitive teaching abilities as well as their natural affinity with children. Nevertheless, they are not the professionals responsible for student progress, and teachers are responsible for ensuring that the work of SSOs with students is effective.

On one occasion, an SSO was observed working with a group of three students at a small round table, creating words from magnetic letters on individual whiteboards, as dictated and simultaneously created by the SSO. The researcher was able to observe the word 'cap' being created by the SSO, who sounded out each part of the word as she put the letters together. Her whiteboard was facing her, but as the three children were virtually seeing an upside-down version of the word, each wrote the sequence '*caq*' on their individual boards. Because of her own orientation, the SSO did not detect the error, and they were about to move on when the researcher intervened. It was suggested that the children could have the opportunity to create the word themselves, before it was created in front of them, perhaps taking turns so that the knowledge of each child could be assessed, or that the activity could be conducted as a barrier game, whereby the children's efforts were

revealed and compared to the correct version at the end of each attempt. If each child had an attempt at each word, the boards could be held under their chins for checking, so that there was no confusion about letter orientation. The activity, as it was originally progressing, was not providing an opportunity for the children to practise their letter-sound knowledge, their phonological or their blending skills, and was probably causing confusion as they carefully copied an incorrect sequence of letters. While not every word would be as open to confusion, it was clear that very little useful learning was occurring in this activity, but with some small adjustments, it could have.

On a number of other occasions, SSOs were observed working with small groups or individual children, and misunderstandings were evident in how they were responding to the children's attempts. Teachers, as the individuals responsible for programming, need to give very close instructions to SSOs, preferably model the sequence, and monitor to check that it has been understood. While some confusions continued to be observed as the project progressed, there was also evidence of more teacher involvement in supporting SSOs, and of monitoring their work with students. Effective support of SSOs also demands that the teachers themselves have clear understandings of the procedures.

Thus classroom observations throughout the year confirmed that teaching practices were changing, and while differences remained in the levels of teacher effectiveness, **movement towards more effective practice was evident in all teachers.**

PROJECT OUTCOMES: STUDENTS

4. To what extent did the early reading outcomes of students change as a result of the professional learning program?

The ultimate goal of developing teacher and SSO practice was to improve students' early reading outcomes. In this section, student results are presented as pre- and post changes in *each group's average performance* on the various assessments. Data on each individual student were provided for the class teacher, but including results for individual students would not be realistic in a report of this size.

In most cases, the group data were analysed for statistical significance and Cohen's effect size values were calculated. Considering that narrowing the gap in achievement between Aboriginal students and their peers is a national priority, the results of Aboriginal students were analysed separately as well as being included with the combined results. The small numbers of Aboriginal students in each year meant that application of statistical procedures such as a t-test would be inappropriate, but in some cases effect sizes could still be calculated, and were done so for the purposes of comparison. Caution needs to be applied when interpreting the effect sizes, particularly in cases where the standard deviations (SDs) were very large. Large SDs reflect wide variance in the individual responses, and calculations based on the difference between the means would be affected by 'outliers', scores that differ greatly from the mean.

Oral language development

Figure 4 displays the average pre- and post intervention scores for students in Reception, Year 1 and Year 2 in oral language as assessed by the Crevola and Vineis (2004) instrument. The maximum score

is 15, which is the target level for students by the age of six. For most students, this would be early or mid Year 1.

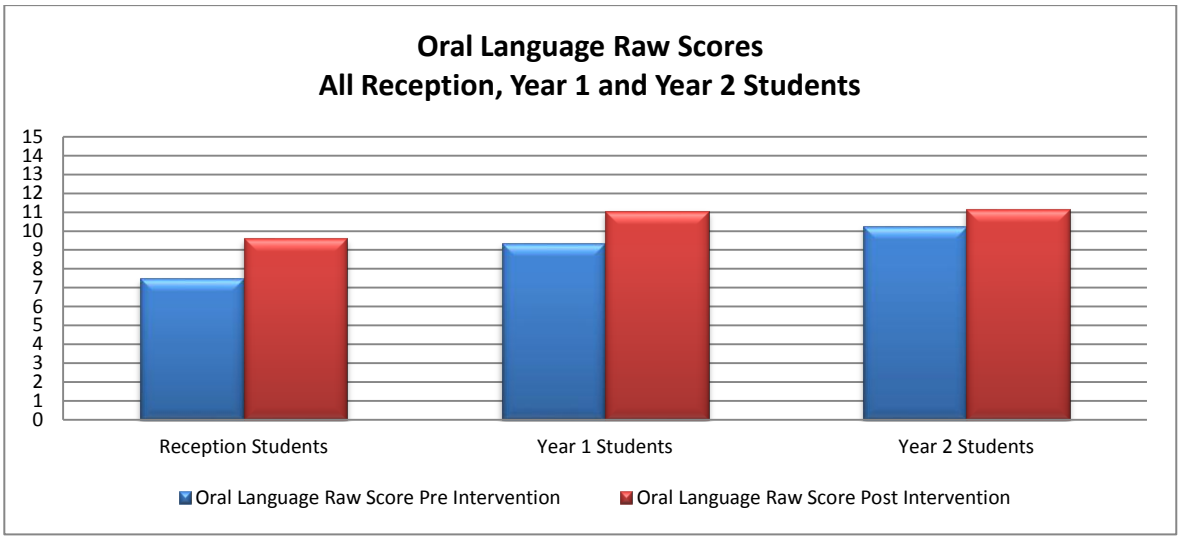


Figure 4: Pre- and post intervention oral language scores of students in Reception, Year 1 and Year 2.

While these results reflect continuing issues in oral language, growth throughout the seven to eight months of the intervention was evident, especially for Reception and Year 1 students. The improvement in the Reception students could have been due to the fact that the children were, perhaps for the first time, consistently exposed to Standard Australian English, and school provided opportunities for oral language with proficient Standard English speakers. The almost negligible average improvement in the Year 2 students is of concern. The declining rate of improvement over the three years also highlights the need to intervene early, when it appears we have the best chance of developing this underlying ability. The Year 2 results could also reflect a reduced emphasis on oral language development after Reception. The following section provides analysis of each year group's average performance.

Reception students

Pre- and post project scores for 171 Reception students' oral language were analysed using a paired sample t-test as summarised in Table 10. There was a significant difference ($t[170] = 10.69$; $p < 0.0001$) between the pre-intervention scores (mean = 7.49, SD =3.95) and the post scores (mean = 9.60, SD = 3.54). Cohen's *d* (0.56) indicated a moderate effect size. Effect sizes above .4 suggest better than typical growth across a year, thus the oral language development in seven to eight months in this project was positive, but the overall results suggest further development in this area is necessary.

Table 10: *Statistical summary of oral language results for all Reception students*

Reception students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Oral language	7.49	9.60	3.95	3.54	10.69	170	<0.0001	0.56

Year 1 students

The average pre- and post-project scores for 118 Year 1 students' oral language were also analysed using a paired sample t-test as summarised in Table 11. There was a significant difference (t[117] = 8.65; $p < 0.0001$) between the pre-intervention scores (mean = 9.35, SD =3.51) and the post scores (mean = 11.07, SD = 3.19). Cohen's *d* (0.51) indicated a moderate effect size.

Table 11: *Statistical summary of oral language results for all Year 1 students*

Year 1 students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	d
Oral language	9.35	11.07	3.51	3.19	8.65	117	<0.0001	0.51

Year 2 students

Similarly, pre- and post project scores for 53 Year 2 students' oral language were analysed using a paired sample t-test as presented in Table 12. There was a significant difference (t[52] = 3.05; p = 0.0036) between the pre-intervention scores (mean = 10.26, SD =2.99) and the post scores (mean = 11.17, SD = 2.48). Cohen's *d* (0.33) indicated a small effect size.

Table 12*: Statistical summary of oral language results for all Year 2 students*

Year 2 students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Oral language	10.26	11.17	2.99	2.48	3.05	52	0.0036	0.33

Oral language development of Aboriginal students

Figure 5 presents the average pre- and post-intervention oral language results for the Aboriginal students across the year levels.

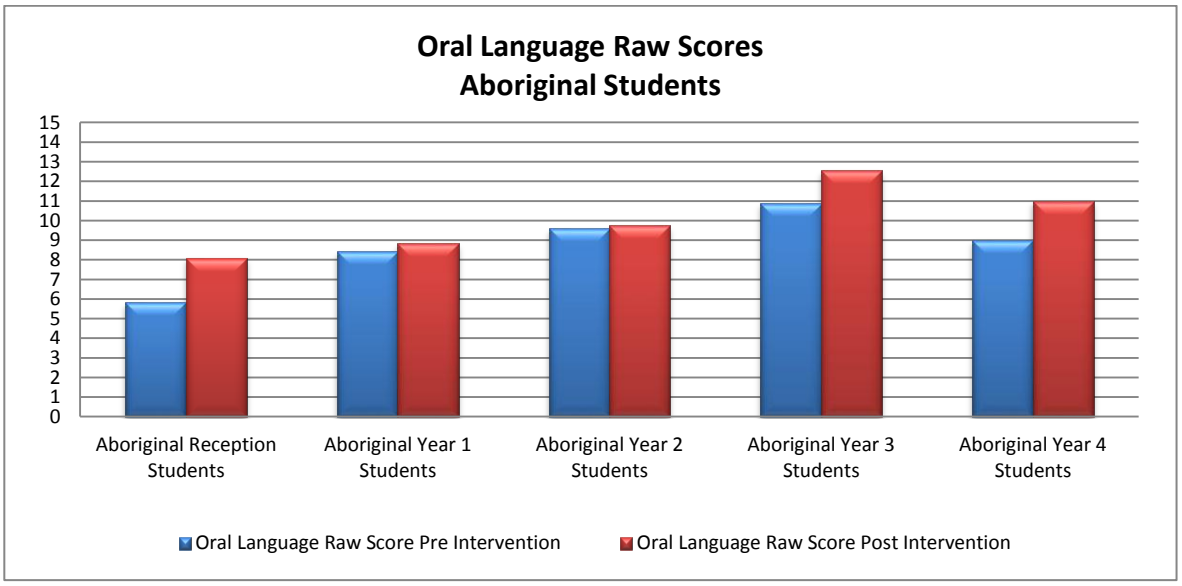


Figure 5: Average pre- and post-intervention oral language results for the Aboriginal students

Aboriginal students in Reception

Although the Aboriginal students started from a lower level of achievement than their peers, the 10 Reception students increased their score by an average of 2.3 points, which was more than the increase achieved by the overall group of Receptions students. Cohen's *d* (0.67) indicated a moderate effect size. The average improvement in the Reception students was the largest of any of the Aboriginal classes, which again highlights the importance of intervening with children as early as possible.

Aboriginal students in Year 1

The 17 Year 1 Aboriginal students made smaller gains than the overall group. For this group, Cohen's *d* (.09) indicated a very small effect size.

Aboriginal students in Year 2

There were 12 Aboriginal students in Year 2. Cohen's *d* (0.05) indicated a very small effect size. This minimal average improvement was consistent with the combined Year 2 group, and was a disappointing outcome.

Aboriginal students in Year 3

There were 9 students identified as Aboriginal in Year 3. Cohen's *d* (0.71) indicated a moderate effect size. While there are no other Year 3 results for comparison, the growth in these children was equivalent to the overall growth of the combined Reception group, i.e. around two points (as assessed by the Crevola and Vineis instrument) over the seven to eight months of the program. These results are encouraging, and reflect the fact that continuing work on oral language with older students can have an impact.

Aboriginal students in Year 4

There were only two students in Year 4, so analysis of the average growth was not useful.

Phonological skill development

As explained earlier, the Screen of Phonological Skills was designed for students aged four to six years. Many standardised assessment instruments provide percentile scores, which reflect positions in a rank order, and can be useful to compare children's progress over time. For example, a student at the 70th percentile performed better than 70% of other students who have taken the same test. If his or her previous percentile rank was 59, it shows that the child's performance has improved relative to other students.

Percentile scores can be allocated to stanines, which divide percentiles along a nine-point scale. Stanine 9 is the highest and includes scores in the top 4%. Scores in stanines 4, 5 or 6 are within the average range, with stanine 5 being the mean. Table 13 shows how percentile ranks are positioned across the nine stanines.

Table 13: *Relationship between stanines and percentile ranks*

Description	Stanine	Corresponding percentile ranks
Very high	9	96 and above
Above average	8	90-95
	7	77-89
Average	6	60-76
	5	40-59
	4	23-39
Below average	3	11-22
	2	4-10
Very low	1	3 and below

The SPA provides stanines for children aged up to 5 years and 11 months. No SPA stanines are available for older children, but if, for example, the score of a child aged 9 years and 6 months were placed in stanine 5, it would mean that that child's phonological development was only average for a much younger child, and would signify a considerable problem. All children in Years 2-4 with secure phonological skills should score in the upper stanines on the SPA. Any older children whose scores are in stanines 7 or below have poor phonological skills. These considerations should guide interpretation of the following Figures.

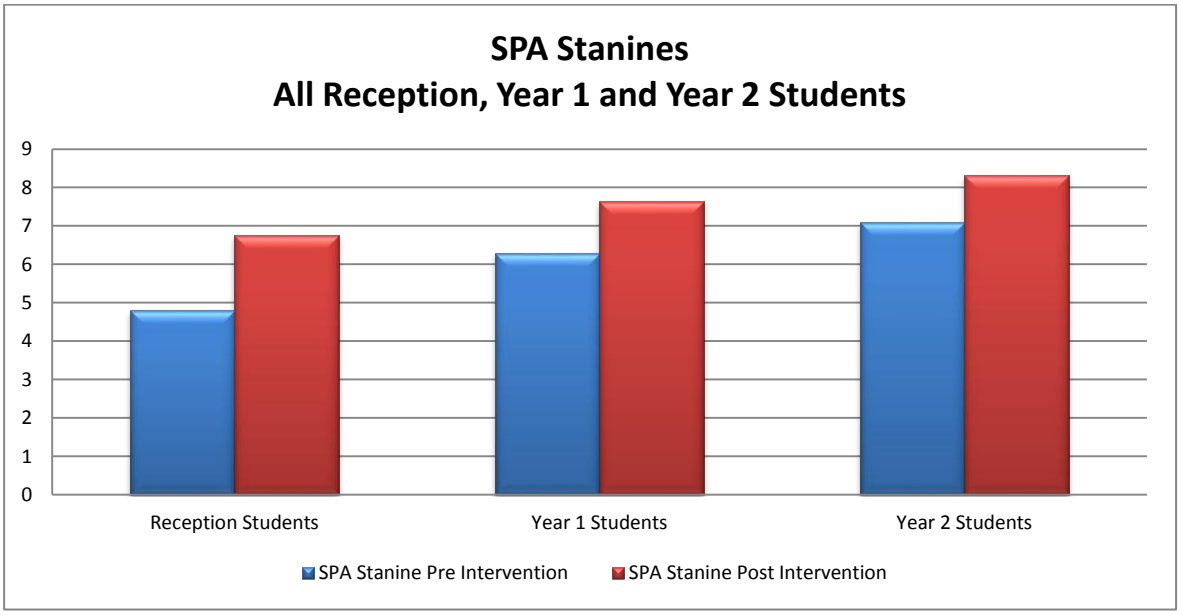


Figure 6: Pre- and post stanine scores for combined Reception, Year 1 and Year 2 classes

Reception students

Because of the factors explained above, the most valid conclusions can be drawn from the Reception students' results. As a group, they were approaching Stanine 7 in their post assessments (early October), having been almost precisely at the mean at pre-test (early March). This means **they moved as a group from average achievement to achievement within the top 30%, which reflects significant progress in this area.**

Pre- and post project scores for 170 Reception students were analysed using a paired sample t-test, as displayed in Table 14. There was a significant difference ($t[169] = 12.75$; $p < 0.0001$) between the pre-intervention scores (mean = 4.81, SD =2.42) and the post scores (mean = 6.76, SD = 1.90). Cohen's *d* (0.89) indicated a large effect size. As development in this area is a focus in Reception, significant growth should be expected, but some Reception children had been at school for only one or two terms, so these results reflected good progress in this area. The post standard deviation of almost 2 reveals that while average improvement was significant, some children were not progressing as they should. In those cases, analysis of the individual student data, which was available to their class teachers, would be required to target the particular areas requiring attention.

Table 14: *Average pre and post intervention SPA scores for all Reception students*

All Reception students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Phonological skills	4.81	6.76	2.42	1.90	12.75	169	<0.0001	0.89

Year 1 students

Combined results for Year 1 reflect the fact that, as a group, the students began the year with satisfactory phonological skills, as a significant proportion of them would have been under the age of 5 years and 11 months at pre-test. At post-test, the group had moved to Stanine 7, which would reflect satisfactory progress for a group just above the age for which the stanines were developed.

Pre- and post-project scores for 124 Year 1 students were analysed using a paired sample t-test, and are displayed in Table 15. There was a significant difference ($t[123] = 7.58$; $p < 0.0001$) between the pre-intervention scores (mean = 6.25, SD =2.78) and the post scores (mean = 7.65, SD = 1.87). Cohen's *d* (.59) indicated a moderate effect size. Thus progress for the Year 1 students was not as pronounced as that of the Reception students, but on average they were at a satisfactory standard at post-test.

Table 15: *Average pre and post intervention SPA scores for all Year 1 students*

All Year 1 students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Phonological skills	6.25	7.65	2.78	1.87	7.58	123	<0.0001	0.59

Year 2 students

The results for Year 2 students were analysed using a paired sample t-test, and are presented in Table 16. There was a significant difference ($t[51]= 5.22$; $p < 0.0001$) between the pre-intervention scores (mean = 7.10, SD = 2.24) and the post scores (mean = 8.31, SD = 1.23). Cohen's *d* (0.67) indicated a moderate effect size. Year 2 students should have relatively secure phonological skills, and should score within Stanine 8 or 9 on an assessment targeting children two years younger. Some students in this cohort of Year 2 students had been identified as those who were not making

satisfactory progress, and while the post-intervention average was within Stanine 8, the standard deviation of 1.23 reveals that there would still be concerns for the phonological skills of some individual students.

Table 16: *Average pre and post intervention SPA scores for all Year 2 students*

All Year 2 students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Phonological skills	7.10	8.31	2.24	1.23	5.22	51	<0.0001	0.67

Phonological development of Aboriginal students

The pre-intervention scores of the Aboriginal students in Reception, Year 1 and Year 2 were on average a full stanine below the combined classes, but considerable growth occurred in each year level, as presented in Figure 7.

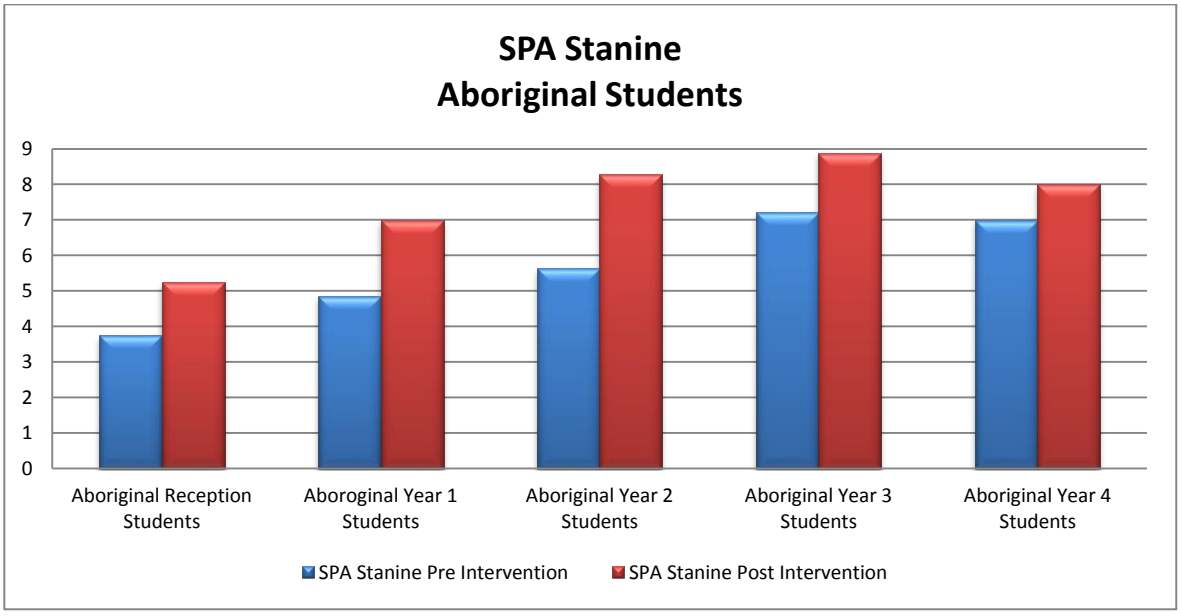


Figure 7: Pre- and post intervention SPA scores for Aboriginal students

Reception Aboriginal students

There were 10 Aboriginal students in Reception classes for whom both pre- and post assessments were available. Cohen's *d* (1.01) indicated a very large effect size. While not matching the post-program level of the overall group, they moved from stanine 3, which is below average, to the mean stanine 5 within the seven to eight months of the program. **This represents significant growth for the Aboriginal students in Reception classes.**

Year 1 Aboriginal students

Pre-and post SPA assessments were available for 14 Year 1 Aboriginal students. Cohen's *d* (0.72) indicated a moderate effect size. The average score at post-test was at stanine 7, which would reflect a satisfactory standard for a group of students aged 6 to 7 years.

Year 2 Aboriginal students

Pre- and post SPA assessments were available for 11 Aboriginal students in Year 2. Cohen's *d* (1.11) indicated a very large effect size for this group (although with this sample size, results of a small number of children can distort the overall results). Nevertheless, **from a pre-intervention average that was more than a stanine below the overall Year 2 average, the Aboriginal students improved at a greater rate, so that their post-intervention average matched that of their peers.**

Once again, this encourages the view that working with older students on their phonological skills can result in significant improvements.

Year 3 Aboriginal students

Pre-and post SPA results were available for the nine students identified as Aboriginal in Year 3. Cohen's *d* (1.43) indicated a very large effect size. While no comparative class groups are available for the Aboriginal students in Year 3, post-intervention results reflect that on average they are almost within stanine 9, albeit for Reception students. It is nevertheless an average result that demonstrates secure phonological skills.

Year 4 Aboriginal students

With only two students in Year 4, analysis of the average growth was not useful, but the graph reveals that these two students had not achieved the phonological skills of either the Year 2 or 3 students. Considering that the available stanines relate to children aged up to 5 years and 11 months, results for the two Year 4 students are of concern.

Difficulties may well have been so deep in these older students, or other factors such as attendance or resistance to intervention were playing such a major role, that learning was being severely hampered. The need for intervention with students at the earliest stages is again highlighted.

Alphabetic Knowledge Development

Development of students' alphabetic knowledge was one of the major aims of the YMN project. Progress in this area was determined by pre- and post intervention assessment using the Alphacheck. Deep knowledge of the letter-sound relationships allows readers to access the code that underpins the English language in its written form without conscious effort, thus freeing up cognitive space for comprehension.

The Alphacheck assesses different categories of alphabetic knowledge, from simple to complex, as can be seen in Figure 8. To simplify reporting for each year level, statistical analysis was confined to two important areas for beginning reading: *early letter sound knowledge* and *blending ability*. The letter sound category (second column in Figure 8) included knowledge of all single letter-sounds and common consonant digraphs. Early *blending ability* was analysed by averaging the results of the columns containing vowel-consonant (vc) and consonant-vowel-consonant (cvc) words (e.g. up, ran); and ccvc and cvcc combinations (e.g. best, melt). While reading words in all columns requires blending skills, more complex letter-sound knowledge is required to read words in the latter six columns, so it becomes an assessment of more than blending. Once the *concept of blending* is secure, children have little difficulty with this skill.

Reception students

Figure 8 presents the average pre- and post intervention results for 173 students in Reception classes. These results include those of Aboriginal and non-Aboriginal students, and students who had been enrolled for up to five terms as well as those who had only been enrolled for one or two terms.

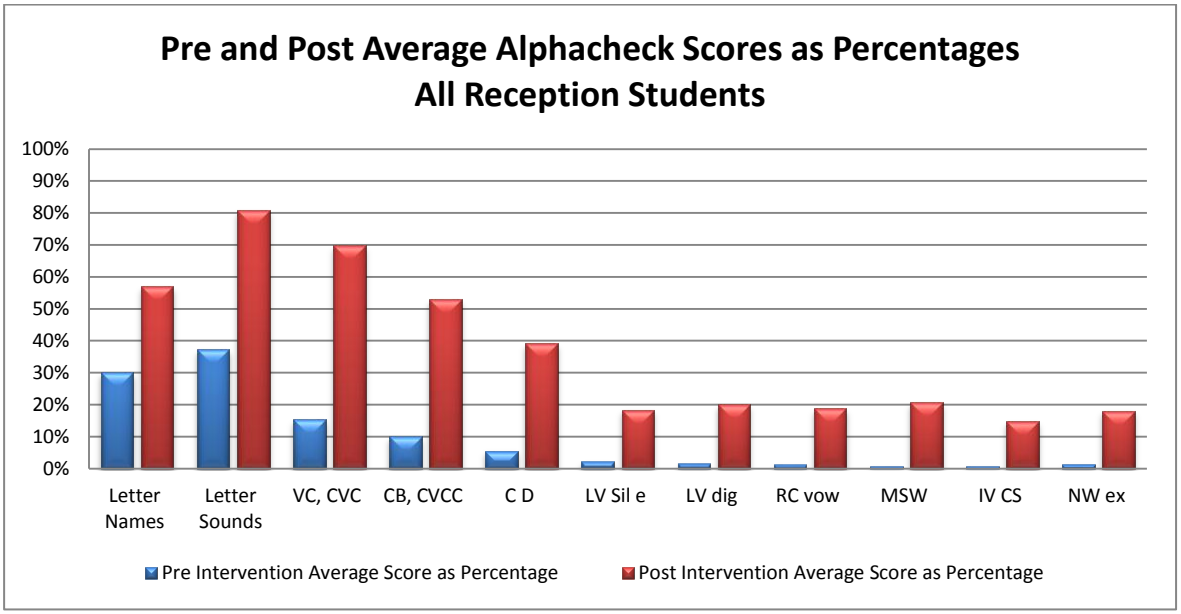


Figure 8: Average pre and post intervention Alphacheck scores for all Reception students

Pre and post scores for Reception students' letter sound knowledge and blending ability were analysed using paired sample t-tests and are summarised in Table 17. Discussion of each follows.

Table 17: *Statistical summary of average pre and post intervention Alphacheck scores for all Reception students*

All Reception students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter sounds	37.28	80.76	32.60	21.74	20.02	172	<0.0001	1.57
Blending	12.72	61.33	27.39	37.30	17.40	172	<0.0001	1.49

Reception – letter-sound knowledge

When pre and post scores for Reception students' letter sound knowledge were analysed using a paired sample t-test it was found that there was a significant difference ($t[172] = 20.02$; $p < 0.0001$) between the pre scores (mean = 37.28, SD =32.60) and the post scores (mean = 80.76, SD = 21.74). Cohen's *d* (1.57) indicated a very large effect size, suggesting growth well beyond what would normally occur in seven to eight months. The very large standard deviation present on the pre-test suggests a wide range in student knowledge at the beginning of the program. As many children arrive at school with very little knowledge of the sounds, and teaching the letter-sounds is a focus in Reception, significant growth in this area should be expected, but these results are highly encouraging. The lower standard deviation on the post-test suggests that there was less variation in

the students' post-test results, but there would still be students within the group who were struggling.

Reception – blending

When pre and post scores for Reception students' blending skill were analysed using a paired sample t-test it was found that there was a significant difference (t [172] = 17.40; p < 0.0001) between the pre scores (mean = 12.72, SD = 27.39) and the post scores (mean = 61.33; SD = 37.30). Cohen's *d* (1.49) indicated a very large effect size. Teaching blending has not traditionally been a focus in the Reception year, but it is introduced very early in a synthetic phonics approach. These results suggest that many children in their first year of school are able to develop this skill quite readily, but the large standard deviation again reveals that while some students were making even stronger gains, some would have been well behind the year average.

Year 1 students

The average pre and post-intervention Alphacheck results for 135 Year 1 students can be seen in Figure 9.

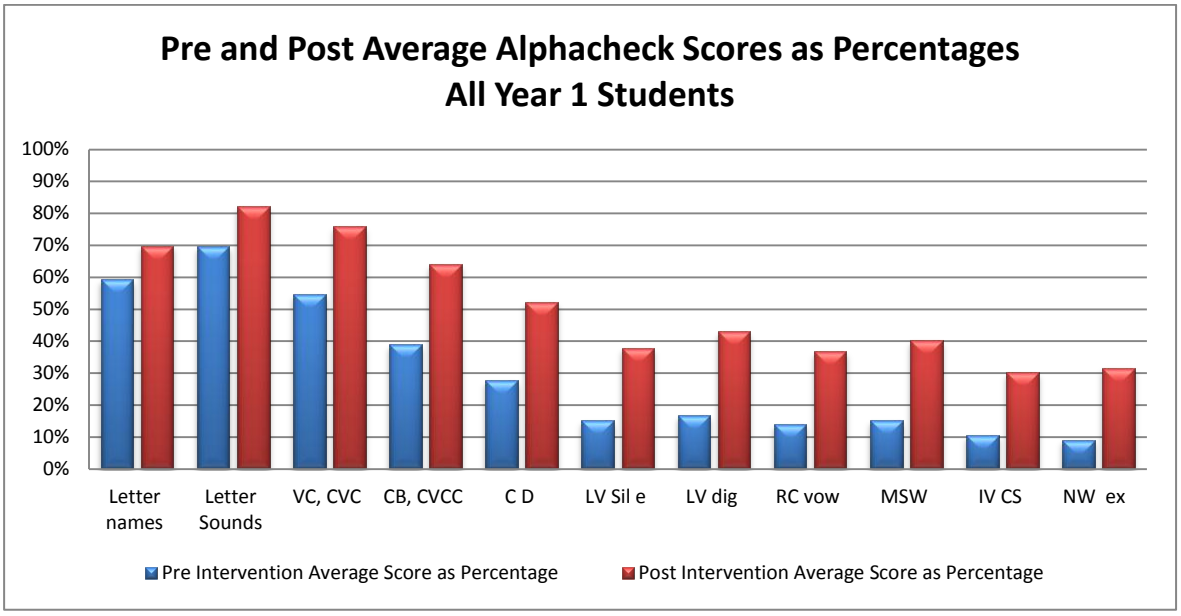


Figure 9: Pre and post average Alphacheck scores for all Year 1 students

Pre and post scores for Year 1 students' letter sound knowledge and blending ability were analysed using paired sample t-tests and are summarised in Table 18. Discussion of each follows.

Table 18: *Statistical summary of average pre and post intervention Alphacheck scores for Year 1 students*

All Year 1 students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Sounds	69.58	82.18	25.81	28.14	4.87	134	<0.0001	0.47 low effect size
Blending	48.61	69.85	38.56	36.05	8.14	134	<0.0001	0.62 mod effect size

Year 1 – letter-sound knowledge

As would be expected, students in Year 1 began with greater knowledge in this area, with 70% of the letter-sounds being the mean level of knowledge at the beginning of the year, thus they had less distance to travel. When pre and post scores were analysed using a paired sample t-test it was found that there was a significant difference ($t [134] = 4.87$; $p < 0.0001$) between the pre scores (mean = 69.58; SD = 25.81) and the post scores (mean = 82.19; SD = 28.14). Cohen's *d* (0.47) indicated a moderate effect size.

Year 1 – blending

When pre- and post scores for Year 1 students' blending skills were analysed using a paired sample t-test it was found that there was a significant difference ($t [134] = 8.14$; $p < 0.0001$) between the pre scores (mean = 48.61; SD = 38.56) and the post scores (mean = 69.85; SD = 36.05). Cohen's *d* (.62) indicated a moderate effect size. Thus, Year 1 students also made substantial progress in these areas.

Year 2 students

The average pre- and post intervention Alphacheck results for 56 Year 2 students can be seen in Figure 10. Again, as would be expected, Year 2 students began the year with greater phonic knowledge than younger students across all the subtests.

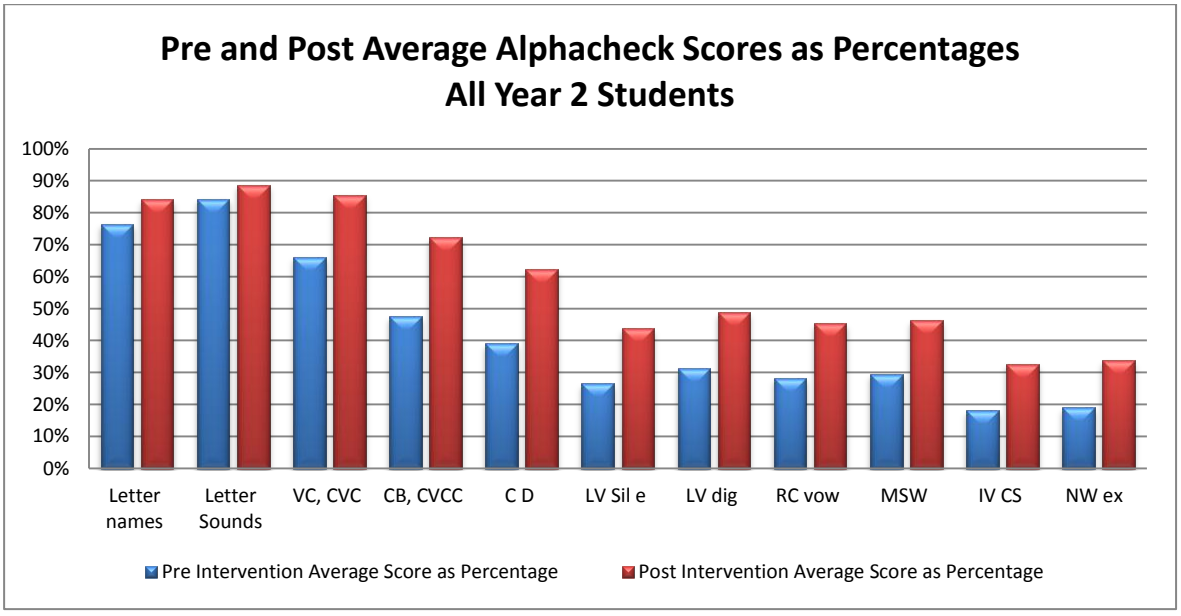


Figure 10: Pre and post average Alphacheck scores for all Year 2 students

Pre and post scores for Year 2 students' letter sound knowledge and blending ability were analysed using paired sample t-tests and are summarised in Table 19. Discussion of each follows.

Table 19: *Statistical summary of average pre and post intervention Alphacheck scores for all Year 2 students*

All Year 2 students	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Sounds	84.34	88.64	17.85	22.16	1.23	55	0.2241	0.21 low effect size
Blending	56.79	78.93	35.64	26.66	5.12	55	<0.0001	0.70 mod. effect size

Year 2 – letter-sound knowledge

When these results were analysed using a paired sample t-test it was found that there was no significant difference (t [55] = 1.23; p = 0.2241) between the pre scores (mean = 84.34; SD = 17.85) and the post scores (mean = 88.64; SD = 22.16). Cohen's *d* (0.21) indicated a low effect size. Although the mean pre-score was over 84%, little growth was recorded throughout the duration of the intervention. By the end of Year 2, most students would be expected to know all the single letter-sound relationships and the common digraphs that were assessed in this subtest. This knowledge should have been a focus for teaching with students identified as having difficulties, and it is disappointing that greater development did not occur. The high standard deviation at post-test also indicates that some Year 2 students would have reached the end of Year 2 knowing very little of this core letter-sound knowledge.

Year 2 – blending

More significant growth occurred in the development of blending skills. Analysis of the pre- and post intervention results using a paired sample t-test found that there was a significant difference (t[55] = 5.12; $p < 0.0001$) between the pre scores (mean = 56.79; SD = 35.64) and the post scores (mean = 78.93; SD = 26.66). Cohen's *d* (0.70) indicated a moderate effect size.

Alphabetical knowledge of Aboriginal students

Results for Aboriginal students were analysed separately and are presented in the following figures. The student numbers in each year level were too small for statistical analysis, but for the purposes of comparison, effect sizes (Cohen's *d*) were calculated for all but the Year 3 and 4 students. Cautious interpretation of the effect sizes is required because of the small sample sizes.

Aboriginal students in Reception

Figure 11 presents the average results for the ten Aboriginal students in Reception classes.

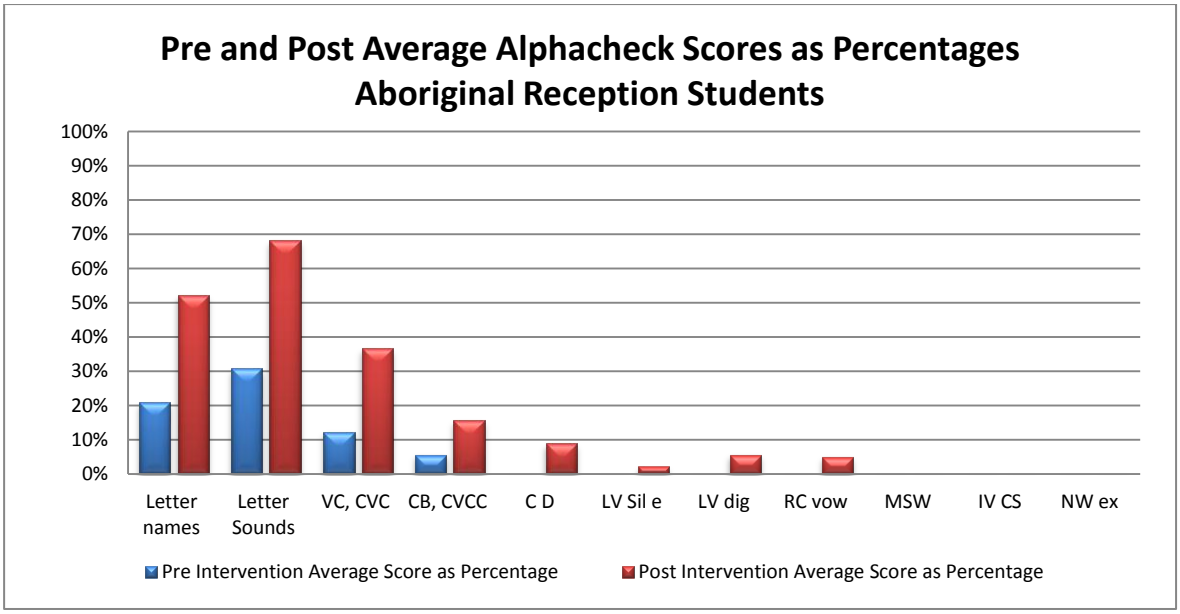


Figure 11: Average pre and post intervention Alphacheck scores for Aboriginal students In Reception classes

Calculation of Cohen's *d* (1.20) for letter-sound knowledge indicated a very large effect size, which suggests that the intervention had a large effect on the Aboriginal students' letter sound knowledge. Cohen's *d* (0.62) for blending ability indicated that the intervention had a moderate effect on this aspect for the Aboriginal Reception students.

Table 20: *Summary of average pre and post intervention Alphacheck scores for Aboriginal students in Reception classes*

Aboriginal Reception students	Pre mean	Post mean	Pre SD	Post SD	Cohen's *d*
Letter sounds	30.78	68.22	33.82	28.30	1.20 large effect size
Blending	8.89	26.11	23.02	31.40	0.62 mod. effect size

Year 1 Aboriginal students

There were pre- and post intervention Alphacheck results available for 17 Aboriginal students in Year 1, as presented in Figure 12.

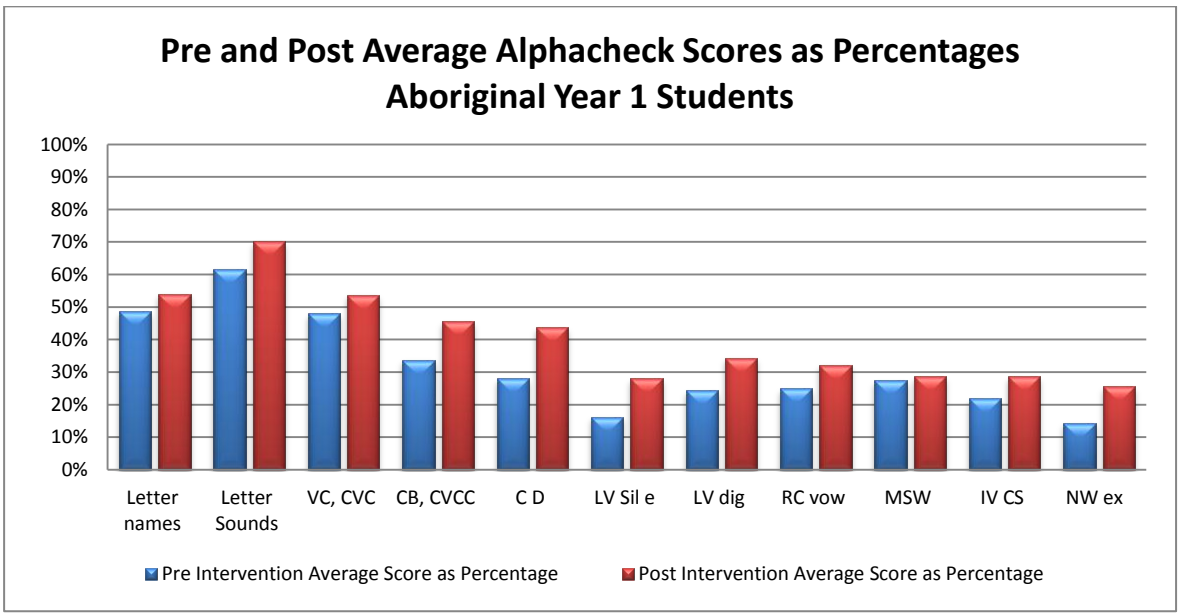


Figure 12: Average pre and post intervention Alphacheck scores for Aboriginal students In Year 1

Table 21: *Summary of average pre and post intervention Alphacheck scores for Aboriginal students in Year 1 classes*

Aboriginal students in Year 1	Pre mean	Post mean	Pre SD	Post SD	Cohen's *d*
Letter sounds	52.29	70.24	38.66	33.44	0.50 mod. effect size
Blending	40.94	56.79	41.09	45.68	0.36 small effect size

The moderate effect size for letter-sounds suggests that the intervention had a positive effect on student alphabetic knowledge. The effect size for blending, calculated only on subtests 3 and 4, was small, but the graph also revealed growth in the harder subtests of the Alphacheck for the Year 1 Aboriginal children, which was encouraging.

Year 2 Aboriginal students

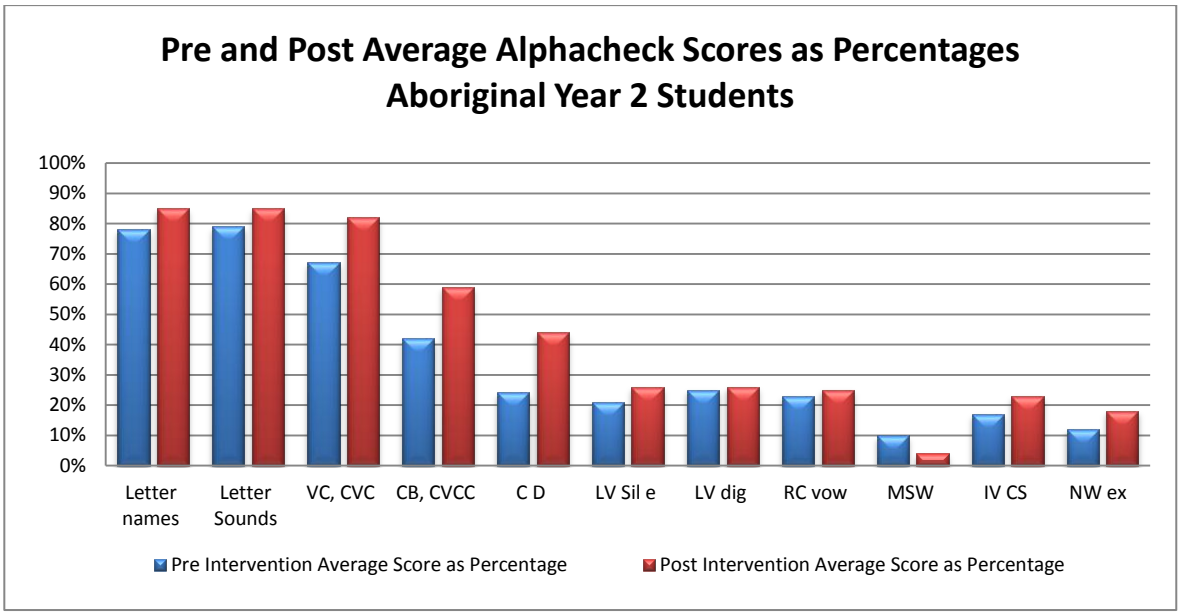


Figure 13: Average pre and post intervention Alphacheck scores for Aboriginal students In Year 2

The moderate effect sizes in both letter-sound knowledge and early blending, as shown in Table 22, revealed that the Year 2 Aboriginal students made better progress than the overall group. Progress in the more complex areas of phonic knowledge, however, did not match that of their peers.

Table 22*: Summary of average pre and post intervention Alphacheck scores for Aboriginal students in Year 2 classes*

Aboriginal students in Year 2	Pre mean	Post mean	Pre SD	Post SD	Cohen's *d*
Letter sounds	78.92	91.60	25.79	6.29	.67 mod. effect size
Blending	54.17	74.50	32.74	19.64	0.75 mod. effect size

These results suggest that Year 2 students can still make progress when taught explicitly, but it may well be harder to engage them if they fall further behind as they get older, particularly as the material becomes more complex.

Year 3 and Year 4 Aboriginal students

Calculations on the small numbers of Aboriginal students in Years 3 and 4 would not be valid, but graphs of their average results have been included.

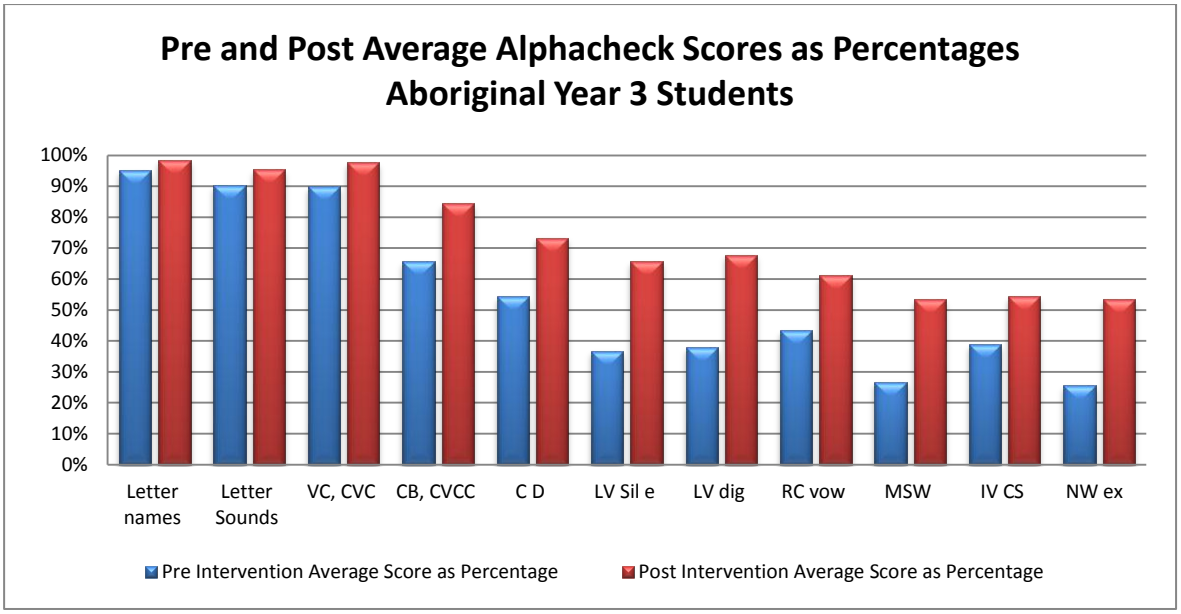


Figure 14: Average pre and post intervention Alphacheck scores for Aboriginal students In Year 3

While there were no other cohorts for comparison, the average results for Year 3 Aboriginal students revealed that they made encouraging progress throughout the intervention, particularly in the more difficult subtests. If this rate of progress continued, these students would be well equipped for their upper primary years.

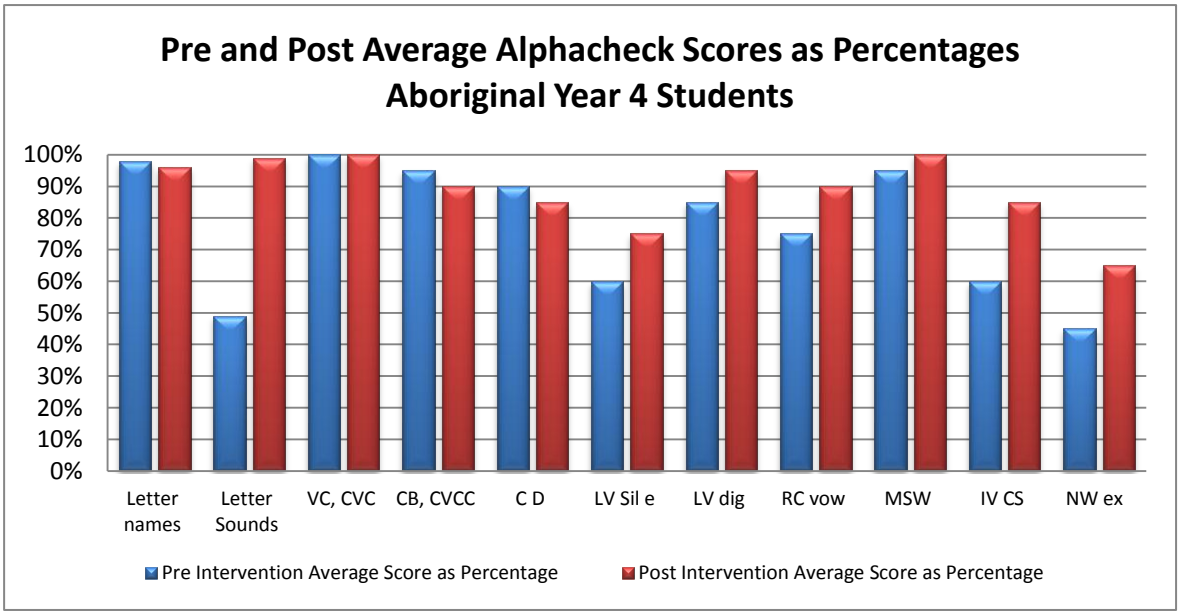


Figure 15: Average pre and post intervention Alphacheck scores for Aboriginal students In Year 4

Similarly, the overall progress shown by the two Year 4 students is highly encouraging, despite some slight reduction in scores in some of the mid-range subtests. The movement from 50% to 100% knowledge of single letter sounds and common digraphs was a major (and necessary) achievement, and growth at the more complex end of the graph suggests that these students would also be able to access the reading material in the upper primary years.

5. How have students responded to key elements of the synthetic phonics approach?

One of the major areas of debate in early reading development is the use of decodable readers, which are specially constructed short texts made up of words that the children can decode; that is, they contain only words made from the letter-sounds the children have been taught, and the sight words taught simultaneously. These texts offer a *short-term strategy* designed to give children the opportunity to practise their decoding skills and so build the automaticity and fluency required for meaningful reading: the practice "cements" their new knowledge. Some consultants and academics reject them on the basis that they are not driven by a high-interest story, the assumption being that such texts are not engaging for children. In fact, it is not the story that attracts the children – it is the realisation that they can actually work out the words on the page – that they can read! Most children move quickly from this stage to reading many different sorts of books, because the skills transfer, and the children also incorporate the other skills they have learnt, such as using the context that knowledge of the words provides.

All teachers responded positively to the quality of the books, but in some schools there were considerable delays while books were catalogued and covered before they were available in classrooms. In one school, they were still officially unavailable at the end of the year, although teachers managed to use them 'unofficially'. In many cases, the freely available decodable texts supplied on the SA SPELD website were used to supplement the Dandelion series of decodable readers that were supplied as part of the project.

Data concerning this question were not formally collected: classroom visits allowed observation of children using them and some quick conversations about whether they liked them, but time constraints meant that most information was drawn from teacher reports. These were, however, consistent with observations by the researcher.

Many children were observed using these texts during the classroom visits, and questions about whether they liked them always met with a positive if brief response. In one classroom, the teacher would occasionally stop all group activities to ask if the students thought the activity they were engaged in was a 'thumbs up' (i.e. enjoyable) or a 'thumbs down' activity. According to the teacher, decodable texts always received a 'thumbs up', and on one occasion observed by the researcher, both thumbs of one student went up.

Another teacher reported the following incident when the decodable texts were first introduced to her R-1 students, whose previous experiences were with highly predictable texts. The books were distributed after an explanation by the teacher, and children were placed in pairs and sent off to read the texts to each other. One student said in a very concerned tone, "But I can't read". The teacher assured her that she would be able to read all the words in this book, reminding her that she knew all the letter-sounds in the book and how to put them together. Still looking concerned, she went off with her partner. The teacher reported that a few minutes later, she heard 'an absolute whoop of delight' as the student ran to her shouting, 'I can read! I can read!' This seems to confirm the words of Louisa Moats (1998):

> Adult distaste for decodable books fails to respect the child's need to exercise a skill. Children want to be self-reliant readers and are delighted when they can apply what they know (p. 6).

Impact on student outcomes of teacher engagement in the project

As with any initiative undertaken with a group of people, levels of engagement differed for various reasons. Most participants, including some with great experience and expertise, were very enthusiastic and willing to try every suggestion, and welcomed the researcher to their classrooms. Schedules were specifically organised to maximise opportunities for class visits by the researcher, and time for individual feedback and discussion was scheduled after each visit. Many participants emailed the researcher regularly to follow up suggestions, ask questions and report informally on student progress.

Other participants participated in the PL sessions and welcomed researcher visits, but did not engage as enthusiastically as the group described previously. There was not the flow of emails between sessions, or the number of questions about implementation.

There was a small number of participants who could be described as 'reluctant', having been nominated by their school leaders, and/or having some insecurity about their teaching and the prospect of their practice being observed. Various strategies were implemented to address their feelings of insecurity: for example, the researcher offered to model strategies during early visits; positive feedback was given as much as possible; suggestions were phrased as questions; and photographs of 'best practice' featuring all teachers who were willing to be observed were willing to be observed were included in the professional learning days following school visits. Despite these efforts, one participant in her first year of teaching was quite overwhelmed by the demands of the project and wanted to withdraw. She was persuaded to stay with the assurance that she was welcome to attend the professional learning days to learn as much as possible, but school visits would only include discussion, modelling of strategies for her, or examination of student data, and the option of not having her student data included in the project. This resulted in a much less stressful experience for this participant, who visibly relaxed, and within a few months was happy to have a classroom visit, and keen to have her student data included.

Another participant withdrew and declined the opportunity to negotiate her participation. A few participants demonstrated more passive resistance by not being available when visits had been planned; scheduling PE or library lessons during the literacy block when a class visit was planned; or not advising when visits clashed with out-of-school activities. While this was disappointing, it is acknowledged that individuals have different 'comfort zones', and that observation by a perceived expert is a threatening experience for many.

It was interesting however, to determine whether perceived levels of engagement in the project affected student outcomes. For this reason, the 23 class teachers were assessed as highly engaged, moderately engaged or less engaged (based on behaviours as explained above and in consultation with YMN regional members of the team), and their class results analysed accordingly. As the purpose of the intervention was the explicit and systematic teaching of alphabetic knowledge with a focus on early blending, these key components of students' Alphacheck results were analysed. Analysis of knowledge of long vowel graphemes – the harder, more complex knowledge that includes some of the most confusing vowel and consonant-vowel

digraphs such as oa, ie, ai, ay, ow and oe – was also included to assess student progress on these harder elements according to teacher engagement.

Results for Reception students according to teacher engagement

There was a total of 86 Reception students of teachers categorised as highly engaged, 38 in classes of moderately engaged teachers and 40 in classes of less engaged teachers. Figures 16, 17 and 18 present results for all Reception students according to their teachers' perceived level of engagement in the project.

What is apparent from the graphs of Reception results is that students in *all* classes made substantial progress in their early reading skills. Analysis using paired sample t-tests (see Appendix I) revealed that results in all cases were statistically significant. This is a welcome outcome, and confirms the view that good instructional practice can make a difference in teachers of varying abilities. The results also confirm that students in Reception classes are capable of learning far more, and far more quickly, than previously thought.

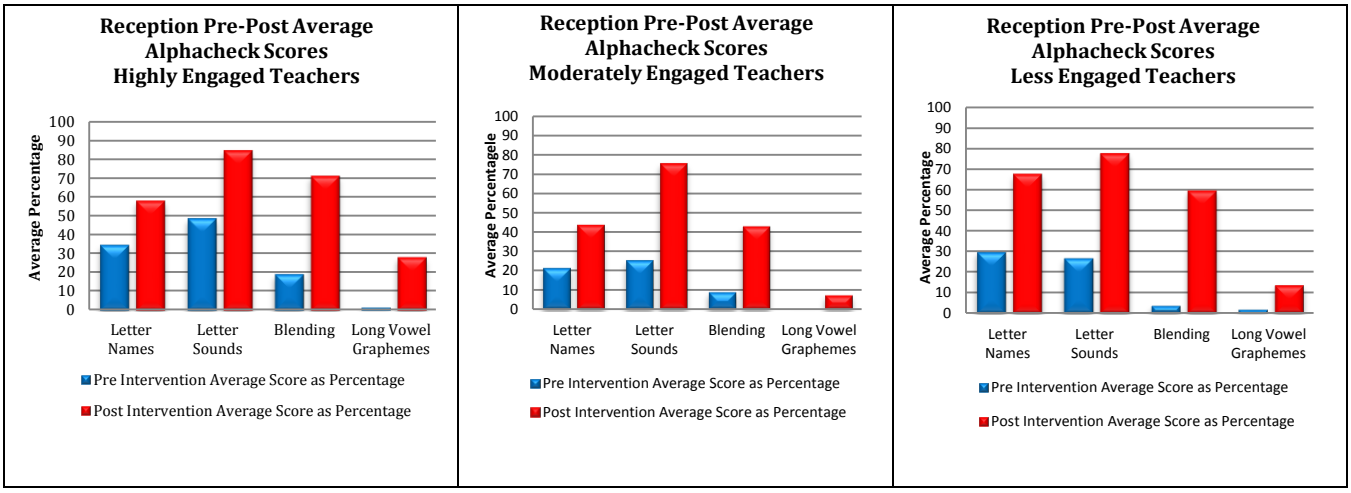


Figure 16, Figure 17, Figure 18: Reception student results according to level of teacher engagement

The graphs also reveal that while Reception students of the highly engaged teachers achieved higher scores post-intervention, they also scored more highly than their peers *prior* to the intervention. It may be that the teachers regarded as *highly engaged* were simply those who were *more effective*, with engagement in the project being another indicator of their broader skills and enthusiasm for teaching. The higher pre-scores could be the result of their better practice even before the intervention began, although this was only a few weeks at the beginning of the year, or their ability to draw more from their students than less engaged teachers. Calculations on the pre- and post intervention results of students in the highly engaged teachers' classes reveal high to very high effect sizes across all elements. (A summary of the statistical analysis of data relating to teacher engagement may be seen in Appendix I.)

Another notable point is that the students of the highly engaged teachers achieved higher scores in the more difficult elements of blending and particularly in their knowledge of the more complex sounds. Again, however, it is encouraging to note that even those teachers considered less engaged were able to support their students in developing blending skills, resulting in the

greatest effect size of the three groups for this skill, because their students had come from a base of virtually no knowledge.

The large standard deviations post-intervention across the four elements in all classes need to be considered. These reveal that while on average each group made good progress, and some children achieved at an extremely high level, there are clearly children in each group who were scoring much lower than the average, and therefore making minimal progress. This highlights the need to monitor individual student progress very closely to identify those who need greater support and time to develop these early skills.

Results for Year 1 students according to teacher engagement

There was a total of 51 Year 1 students of teachers categorised as highly engaged, 45 in classes of moderately engaged teachers and 23 in classes of less engaged teachers. Figures 19, 20 and 21 present results for all Year 1 students according to their teachers' perceived level of engagement in the project.

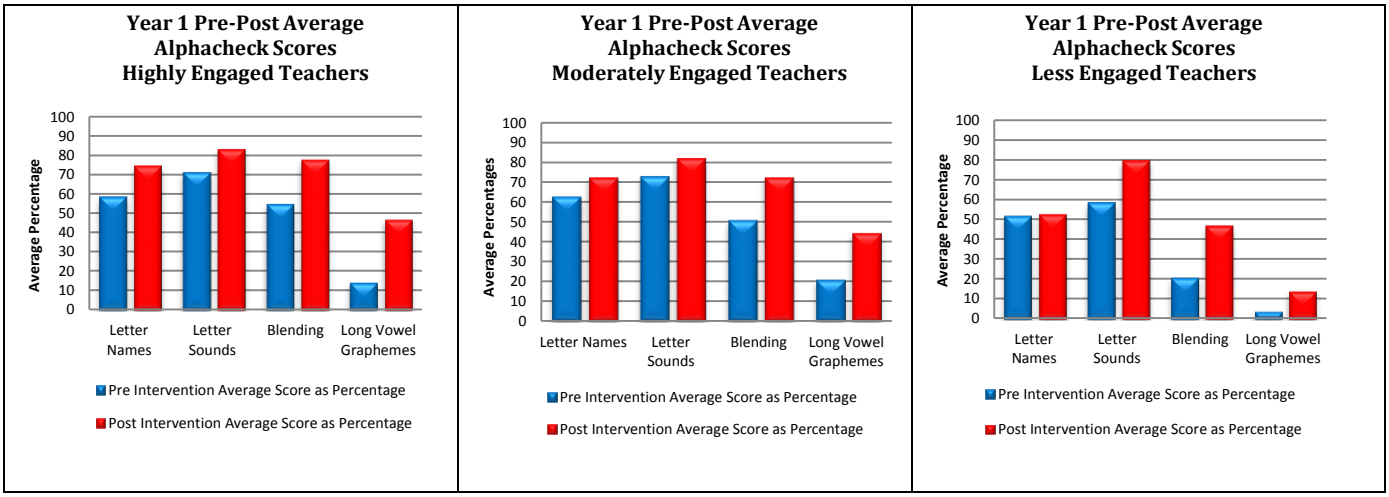


Figure 19, Figure 20, Figure 21: Year 1 results according to level of teacher engagement

The pattern of results according to teacher engagement is similar for Year 1 students. The pre-intervention scores are higher across all skills, which would be expected for children having had an extra year's teaching, thus the potential for progress and large effect sizes was reduced. Again, in all cases, the post-intervention scores of students of the highly engaged teachers were stronger than the other two groups, with results of all skills reaching statistical significance for these students. The differences were greatest in knowledge of long-vowel graphemes, where the effect size for the progress of highly engaged teachers' students was high at 0.91, compared with the low effect size of 0.35 for the less engaged group.

An encouraging aspect of the Year 1 results overall is that the average scores for letter sound knowledge across all classes was around 80%, which means that most of the common digraphs were known. A less encouraging aspect is the trend of poorer student performance as the skills became more complex in the less engaged teachers' classes, supporting the view that teacher engagement had greater impact as the concepts being taught became more challenging.

A further disappointing aspect of the performance of children in the less engaged teachers' classes was their minimal growth in knowledge of letter names, resulting in average knowledge post-intervention at just over 50% of letter names. While knowledge of letter sounds is more helpful for the blending process, letter names become increasingly important for spelling and understanding alphabetical order. In fact, the best average result for knowledge of letter names by the end of the intervention (in classes of the highly engaged teachers) was only around 75%. This is not really good enough for students at the end of Year 1. It was also noted in classroom visits that many students, even in Year 2, were only using letter sounds, even when letter names were more appropriate, such as when spelling out sight words. This may reflect the researcher's emphasis in the professional learning sessions on teaching letter sounds to support the development of blending skills, and highlights for the researcher the need to be more explicit about teaching children letter names as well, certainly by the time children are learning the more complex digraphs.

Again, the large standard deviations in post-intervention results highlight the caution needed when interpreting average scores, as some individual students would have been progressing much more slowly than the average scores would indicate.

Results for Year 2 students according to teacher engagement

There were fewer Year 2 students participating in the project, therefore the sample sizes are smaller for this cohort. There was a total of 18 Year 2 students of teachers categorised as highly engaged, 17 in classes of moderately engaged teachers and just 9 students in classes of less engaged teachers. The smaller sample sizes mean that individual results are more likely to skew the overall results.

Figures 22, 23 and 24 present results for all Year 2 students according to their teachers' perceived level of engagement in the project. The pattern of stronger overall post-intervention achievement for the students of highly engaged teachers continued, although in this cohort, the students of the highly engaged teachers began with less knowledge of letter names than those of the less engaged teachers. Nevertheless, they made up this deficit, outscoring their peers by the end of the intervention.

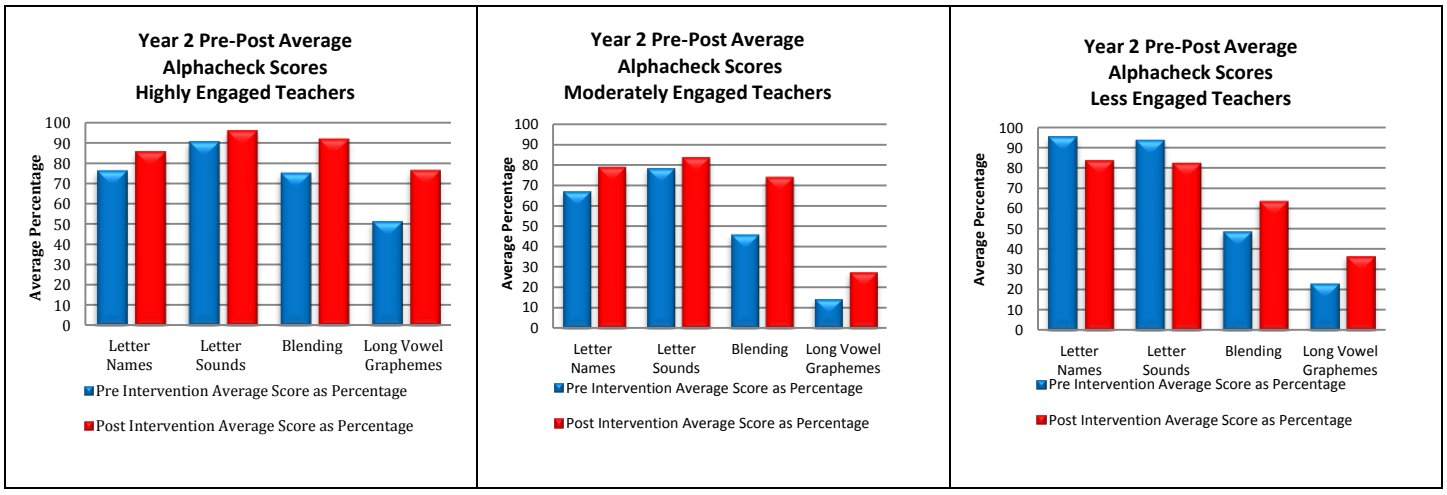


Figure 22, Figure 23, Figure 24: Year 2 results according to level of teacher engagement

The most disturbing trend in the Year 2 results is the average decline in letter name and letter sound knowledge of the students of the less engaged teachers, although again, the large standard deviation suggests that the average results have been affected by perhaps one or two students' poor performance. It could also be the result of the less engaged teachers assuming that Year 2 students had acquired this basic information, and therefore they had not spent any time checking this knowledge, and revising or teaching it as necessary. Some students may have had a superficial, rather than a deeply embedded knowledge of letter names and sounds after Year 1, and without further reinforcement, the knowledge had faded.

It is also apparent that a significant number of students across all groups did not know all their basic letter names at the end of Year 2. These results highlight the need to 'check the basics', as this can affect further development, and the gap in progress quickly widens as children move throughout the primary years.

MAJOR CONCLUSIONS AND IMPLICATIONS

This section draws together the major conclusions of the 2012 Yorke and Mid North Literacy project. It is presented in three sections: conclusions relating to the teachers and SSOs; those relating to student achievement; and those relevant to the overall project.

Conclusions relating to teachers and SSOs

1. **There was a highly significant increase in teacher understanding of the reading process, and how to teach it**. While different schools were involved in a number of initiatives that could have contributed to this, the fact that 23 teachers from 12 schools were involved means we can have some confidence that involvement in the project was in some part responsible. Teachers now have a greater understanding of the reading process, which will inform their teaching from this point on.

2. **There was less overall growth in the SSOs' understanding** than was apparent in the teacher sample, **but analysis of individual items revealed consistent growth in their understanding of the core principles of the project**, such as the need for explicit teaching, and for students with learning problems to have more learning time. Because SSOs are often closely involved in the daily teaching of students who are not making progress in reading, their increased knowledge of the importance of explicit teaching, and how to implement it, should contribute to the progress of students who need it most.

3. **Despite the growth in participants' knowledge, there is still confusion about some aspects of teaching reading in both groups.** Deep understanding of the complex processes that contribute to reading development does not usually happen quickly. While all teachers demonstrated growth, questions asked late in the program revealed that there were still some misunderstandings. The participants have, however, made a powerful start, and if they continue to implement a synthetic phonics approach, their understanding and expertise will continue to develop.

4. While all major elements of the project were seen to be useful, **participants viewed the detailed information provided about synthetic phonics and the introduction of decodable readers as the**

most valuable components of the project. The provision of very specific guidelines allowed the less experienced teachers, who had not been introduced to this material during their training, to see exactly how the instructional sequence should be implemented. The guidelines also allowed teachers who were more familiar with an explicit approach to increase the rate of introduction of new letter-sounds, and so develop this knowledge in many students much more quickly than they had in the past.

5. **The confidence and personal efficacy of both teachers and SSOs regarding their ability to teach all students to read increased significantly**. Believing that they can make a difference is an important outcome for the participants. They are now less likely to succumb to the widespread belief that some children's home backgrounds will inevitably limit their achievement, and that there is little that a teacher can do to overcome home disadvantage.

6. **Classroom observations confirmed that teaching practices became more effective throughout the project,** with evidence of more explicit teaching, more rapid introduction of single letter-sounds, teaching letter-sounds in an order that promoted blending, improved monitoring, and a more fine-grained awareness of how to support students in their reading development. The effort and energy that many participants put into their teaching was inspiring, particularly the efforts of some very experienced teachers who still saw themselves as learners, and who responded so enthusiastically to the project. The most significant differences in student learning occurred with teachers who already had considerable mastery over basic classroom practice, but who accepted the challenge of introducing the letter-sounds more quickly. The project allowed them to refine their existing good practice with the result that students progressed very quickly.

7. **Classroom observations are critical in determining changes in classroom practice, and therefore in determining fidelity of implementation and program effectiveness.**

It takes time to assimilate new knowledge and to develop new practices, particularly if they are not consistent with past knowledge and practices. Without seeing teachers at work, their classroom organisation and their use of teaching resources, it would have been impossible to pick up some basic misunderstandings on the part of the participants. In some cases, depending on time available and the sensitivities of the teacher, there could be some discussion of points following the lesson. If this were not possible, the point, without reference to particular classrooms or teachers, was addressed in the next professional learning session.

Classroom visits also provided very useful information about the effectiveness of the professional learning, and a timely reminder of the need to be explicit when explaining strategies to teachers as well as students.

Conclusions relating to student achievement

Student outcomes are presented for the three specific areas in which pre- and post testing was administered: oral language, phonological skills, and alphabetic knowledge/early blending.

Oral language

8. **The oral language of students in Reception and Year 1 and Year 2 increased on average to a statistically significant level, with the greatest development occurring in Reception students.** Although the assessment instrument used in this study is a relatively 'blunt instrument', in that it

provides only a snapshot of some aspects of a student's oral language, it does provide useful information about students' capacity to understand typical classroom language. In this study, it gave teachers some idea of how they might need to adapt their language and use additional information such as visual cues to support the understanding of their students.

9. **The 9 Aboriginal students in Reception out-performed their Reception peers in terms of growth, increasing their average score by more than two points.** There was also greater growth by the Reception class than any of the other Aboriginal classes. This again highlights the importance of intervening with children as early as possible, as gains made in the early years mean a more positive start, less likelihood of students becoming disengaged, and less need for intervention.

10. **The oral language results of the Aboriginal students in Years 1 and 2 was disappointing, with minimal progress in this area**. **Aboriginal students in Years 3 and 4, however, made greater gains, reflecting the fact that working on oral language in the middle primary years can still have an impact.** This is particularly important for Aboriginal students, as achievement in all areas of literacy depend to a great extent on oral language skills, and their achievement remains well below that of their peers.

11. **Despite the overall gains (as measured by the Crevola and Vineas' instrument), no cohort of students reached a post-intervention average score of 12, which is still below the 15 the authors state should be expected by age six.** These results highlight the need for continued emphasis on this important aspect of literacy development.

Phonological skills

12. **The phonological skills of all Reception, Year 1 and Year 2 students increased to a statistically significant level, with moderate to high effect sizes.** Again, growth in Reception students was greatest, as they moved from average achievement to being within the top 30% after seven months. While phonological development was not targeted in the project, an emphasis on teaching individual letter-sounds builds this knowledge simultaneously. Most schools also had specific phonological programs in place. **The results suggest that as a region, this aspect of early literacy development is being taught effectively**.

13. **The development in phonological skills of most Aboriginal students was very encouraging, including the Year 3 students.** While details of any phonological programming that was conducted with the older students were unknown, it appeared that the emphasis on letter-sound knowledge was an effective way to support phonological development. This, in fact, may be a useful strategy for older students.

The exception was the results of the two Year 4 students, who did not achieve at the level of either the Year 2 or Year 3 Aboriginal students. This could be the result of deeply ingrained problems that required very targeted programming, or could reflect attendance problems.

Alphabetic knowledge and blending

14. **Strong growth occurred in Reception students' alphabetic knowledge and blending skills throughout the project**. **This development was highly statistically significant, with high effect sizes, reflecting a very positive outcome in this core aim of the project.** The post intervention blending

results support the view that many Reception students are capable of developing this important skill much more quickly than was previously believed.

15. **The Year 1 group mean results for letter-sound knowledge and blending were also statistically significant with moderate effect sizes. Very large standard deviations in both categories, however, indicated that some students were lagging far behind their peers. A further concern with the Year 1 students was the fact that on average, only 70% of letter names were known by the end of the project.** This elementary knowledge, which is critical if fluent reading and comprehension are to develop, should be well established by the end of Year 1 for most students.

16. **The growth in letter-sound knowledge of the Year 2 students was minimal.** Most students at the end of Year 2 should have this material well under control, and until this elementary knowledge is secure, further reading development will be hindered. The high standard deviations at post-test also indicate that some students would have reached the end of Year 2 knowing very little of this core knowledge.

17. **The blending ability of Year 2 students' developed to a statistically significant level, with a moderate effect size.** This suggests that more focus was placed on blending at the expense of alphabetic knowledge. Further progress in both decoding and comprehension will nevertheless be affected if the early material is not mastered.

18. **The growth in alphabetic knowledge of the Aboriginal students largely mirrored that of the whole year cohorts.**

Aboriginal students in Reception and Year 1 made substantial progress in both letter-sound knowledge and blending, although their progress did not match that of the whole group. Effect sizes were smaller in Year 1 because they began with a greater level of knowledge. Viewing the progress of the 17 Year 1 Aboriginal students across the range of skills reveals progress in all areas, but progress of the 9 Year 2 students was minimal apart from early blending. Their reading of more complex words was not as advanced as that of the Year 1 students.

These results could be explained by the fact that most of the Year 2 students in the project were included because they were not making satisfactory progress, but greater improvement was expected from a targeted program. While there were no groups for comparison, the growth of letter-sound knowledge and blending with the Year 3 and 4 Aboriginal students was more encouraging, reflecting the importance of persisting with these older students.

19. **There were very large standard deviations evident in analyses of Alphacheck results, indicating wide variance in the scores.** The Alphacheck results revealed that while on average each group made good progress, and some children achieved at an extremely high level, there were clearly children in each group who were scoring much lower than the average, and therefore not developing the requisite knowledge and skills to become independent readers. This highlights the need to monitor individual student progress very closely to identify those who need greater support and time to develop these early skills.

20. **Comparison of student progress relative to teacher engagement revealed that students in *all* classes made substantial progress in the areas of focus.** These were encouraging findings, and suggest that *all* teachers, from the least to the most enthusiastic, can benefit from learning specific

strategies that support early reading skills, and thus all students can benefit. The explicit guidelines for implementation of a synthetic phonics lesson appeared to be an important part of the professional learning.

21. **Students of highly engaged teachers scored more highly on both pre- and post intervention assessments.** The highly engaged teachers were more effective both before and after the intervention in terms of student reading outcomes. While student cohort differences cannot be ruled out as the cause of the better performance, the large sample size across so many schools suggests that teachers classified as highly engaged did have some quality – some capacity to draw more from their students - that was not as evident in the less engaged teachers.

22. **The greatest impact of teacher engagement appeared to be on achievement of the more complex material**. **Students in the highly engaged teachers' classes outperformed other students across all year levels on the more difficult skills.** The impact of an enthusiastic teacher who was highly engaged in the professional learning may be more pronounced once the concepts being taught become more challenging.

Conclusions relating to the overall project

23. **The decodable readers were a valued part of the project**. Teachers reported that they were particularly helpful for the students who were making slower progress but were popular with all students. These views were supported by classroom observations. There was no evidence that the children found these resources boring or demotivating.

24. **The instructional sequence used in this project does not require a specific program**, although *Letters and Sounds* and *Jolly Phonics* are programs that apply these principles and provide useful resources to support teaching. Teaching the letter-sounds in a sequence that supports blending, and teaching blending as soon as the first few letter-sounds are known are critical elements, and can be applied without a commercial program.

25. **There were several examples of 'value-adding' to the project**, which occurred because members of both the ECU and YMN teams were excited by the potential of the project, and willing to explore avenues that could maximise its effects.

More classroom visits than were originally planned were undertaken by the researcher when it became clear that these were critical in determining the effectiveness of the PL sessions, in assessing the extent to which the program was being implemented, and in supporting teachers and SSOs. Costs of extra flights were minimised by staying extra days when in South Australia on other projects, and by economising on accommodation and per diem allowances.

ECU and the YMN region jointly funded the production of two short DVDs. The first was an eight-minute promotional video that captured classroom footage of teachers using the synthetic phonics sequence with their students, and included comments from school leaders regarding the implementation of the program and their perceptions of its success. The second was a 12-minute training video that summarised the Big Six elements required for skilled reading to develop, and footage of most teachers involved in the 2012 project as they implemented the synthetic phonics instructional cycle. It was designed for distribution to all schools involved, and further afield, to help new staff members become familiar with the different components of the synthetic teaching cycle,

and to provide information about resources to support their teaching. While these were time- and energy-consuming, the videos have been very well received, and it is hoped that they continue to support sustainability of the project goals.

RECOMMENDATIONS FOR PRACTICE [1]

This section contains recommendations for the teaching of all students, including Aboriginal students.

1. A synthetic phonics approach should be implemented as the most effective approach to teaching the alphabetic knowledge required for meaningful reading to develop.

2. A synthetic phonics program should begin in Reception, and be continued throughout the primary years until the knowledge contained within the first six phases of *Letters and Sounds* is secure.

3. The focus on oral language development should continue well beyond the Reception year, as students who begin school without the vocabulary and Standard English structures expected of a five year old will struggle to acquire both the decoding and the comprehension components of reading without continued support.

4. The teachers identified as highly engaged in this project developed significant expertise and experience in the delivery of a synthetic phonics program, and would have great credibility with their peers. They should be used in some systematic way by SA DECD to support other teachers in the development of these skills. They could also support network meetings of teachers and SSOs involved in this project to maintain the momentum, and to share resources and teaching strategies.

5. The training video developed as part of this project could be distributed and used as both a regional and statewide resource.

RECOMMENDATIONS FOR RESEARCH

1. The benefits of a synthetic phonics approach to teaching alphabetic knowledge have been confirmed by this study. Aboriginal students whose first language is not English may benefit further from learning the letter-sounds in a sequence that acknowledges the differences between Standard Australian English and their first language. For example, there is little point in beginning the teaching sequence with /s/ and /a/, as is common in several synthetic phonics programs, if these sounds do not exist in their first language. Constructing and trialling a teaching sequence that begins with phonemes that are common to both languages may assist Aboriginal students to develop alphabetic knowledge more easily.

[1] A section of the Project Evaluation Survey invited participants to offer suggestions for improvement, and some of the recommendations have been drawn from that information. A fuller summary of participant suggestions is included as Appendix I.

2. An assessment such as the *Sutherland Phonological Awareness Test – Revised* (Nielson, 2003), that has been normed on a wider age-range of students, would provide more accurate phonological scores for children in classes above Reception.

3. Five to six classroom observations for each teacher participant need to be included for a year-long project aimed at changing classroom practice, with most visits planned for the first half of the year.

FINAL REFLECTION

From the researcher's point of view, extended involvement with the YMN regional team and the participants in this project was an extremely rewarding professional and personal experience, and I thank them for their enthusiasm, cooperation and collegiality. I would particularly like to acknowledge the vision and commitment of then Assistant Regional Director Roger Nottage, who found ways to fund and value-add to the project when all seemed lost; and the passion, eternal good humour and management expertise of Denise Higgins, who supported its implementation so magnificently. No-one learnt more than I did throughout this project.

Associate Professor Deslea Konza
Director – Fogarty Learning Centre

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Suggestions for 75-90 minute Literacy Block Incorporating Early Phonics Teaching for Reception-Year 1

Time	Teaching/Learning Activities
10 mins	**Shared Book and Oral Comprehension** Teacher reads aloud to whole group to: demonstrate enjoyment of reading; model good reading strategies; expose children to a range of text genres; build background knowledge; explore new vocabulary; engage in prediction activities; discuss role of illustrations, ask questions of different types including "what if…?" questions. As you read, you might point out decodable words the children would be able to read for themselves because they have learnt all the phonemes (but you can't do this too much or the flow of the story would be lost. * Shared reading can occur at end of literacy block when opportunities can be taken to revisit known letter-sound knowledge in the text.
20-25 mins	**Explicit Teaching of phonemic awareness/letter-sound knowledge** See expanded notes for sample of teaching of letter-sound knowledge on pages 2-3
4 x 10 min * A smaller number of longer activities can replace 4 x 10 mins	**Application: a rotation of small group activities that require application of new and previous knowledge*** Examples: Blending with magnetic letters Spell and write four words using previous day's phoneme (needs adult to say words) Write last four graphemes Children write a word, phrase or sentence using known letter-sounds Guided reading (needs adult) Listening post Matching words and pictures Reading decodable texts Word sort activities Word building Segmenting words into phonemes using grids Building word families using onset and rime activities
5 mins	**Review and Conclusion** Make an explicit statement about their new learning. E.g. "Today we learnt a new sound that's going to help us read more words. What was it? Who can remember one of the new words we can read now? …etc." "Let's try these…" Revise the new sound and sight words by pointing to them amongst some other letters and words (can use list used at beginning of lesson if new material has been added at some point) You should have evidence of whether or not children have learnt the new material and identified children who are having problems with blending, segmenting or writing.

Unpacking the Explicit Teaching of Letter-Sound Knowledge

Time	Teaching/Learning Activities	Reminders
1 min	Introduction	
	Focus attention on the day's work; e.g. need to be really on the ball; no dreaming, etc.	Be enthusiastic and give sense of how important this is; how well they're doing; etc.
4 mins	Review	
	• review up to **8-10** known sounds and words, including **4** words that include most recently-learnt phoneme and recent sight words	Strongly teacher-directed to maintain momentum
	• have words on board, point randomly to different sounds and words	Try to note students who are slow to respond in group situation
	• mix unison and individual responses	
5-8 mins	Explicit teaching of new phoneme	
	Point to new letter-sound	Ensure that new letter-sound is large and clearly presented on board or flashcard with space all around
	Articulate sound clearly	Be careful not to lengthen sound too much or add voice to a voiceless sound like /h/
	Ask "Everybody - what's this sound?"	
	Ask children to repeat the sound in unison a few times, using a cue like "Everybody…" and occasionally ask for an individual response.	This repetition is to build the automatic connection between the visual pattern and the sound that goes with it – very important for automaticity
	Discuss how the sound is made – mouth and tongue position, flow of air, feel throat for vibration of voiced sounds, nose for nasals, etc	Make this as concrete as possible
	Find things around the room that start with that sound, or refer to objects you have brought for that purpose.	Think about this beforehand so you can maintain lesson momentum
	Demonstrate on the board how letter that makes this sound is written.	
	Draw letter in the air, etc. Children copy in the air, on the mat, on another child's back, etc.	Take care to turn so orientation of letter is correct, not mirror reversed.
	Make new CVC words by blending new and known letter cards on easel or board. Physically push letters together in four stages to gradually represent blending process. E.g. n i p n i p n i p nip →	This is teacher-directed to maintain momentum and ensure children get correct message. Involving children at this stage is tempting but lesson loses momentum as children come to front, etc, and children not involved lose interest.

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	As you read fourth word, draw finger rapidly beneath it. Use new letter in all possible positions, i.e at end and middle of cvc words. Demonstrate blending of other words that use new phoneme in similar way (e.g. pan, pin, ant) Demonstrate segmentation of cvc words, holding up one finger for each phoneme. Children segment words you say using their fingers	Once children are familiar with the blending process, and begin to read word automatically, reduce the four step blending process appropriately, or only go through the steps with those who need it Note children who are having difficulty doing this
5-7 mins	Guided Practice For example, play discrimination game; e.g. say a word that might or might not have that phoneme in it and children put thumbs up or thumbs down. Ask children to come up with suitable words that begin with that phoneme. Phoneme manipulation: demonstrate with letter cards or magnetic letters how to change known cvc words by changing one phoneme at a time. e.g. nip → nap → tap → sap → sat → sit → sip → pip → pin → pit → pat → pan	Ensure you have the list of words prepared. [If relevant, use new letter-sound in the middle and end of words, not just the beginning of words] Children participate by suggesting words but this par of lesson still needs strong direction by teacher.
10-12 mins	Application (as per page 1) Children write or use magnetic letters to form a word, phrase or sentence using new and known letter-sounds. Children should write from oral dictation (i.e. not copy from print) *This application stage can be conducted at tables in one of the small group station activities following the explicit teaching session.	Have word, phrase or sentence prepared A more capable child could read the words prepared by the teacher. *Small individual whiteboards are good for this activity if it is done while children are still seated on the mat.

PHONOLOGICAL AWARENESS AND PHONICS SEQUENCE

Kindergarten

CATEGORY	SKILL	EXAMPLE
Environmental Sounds	Recall sounds in the environment	Listening and retelling sounds heard
	Discriminate between environmental sounds	Discussing sounds heard outside
	Describe the sounds they hear	Sound Lotto and above activity
	Placing sounds in a context	Describing sounds heard and finding associated pictures
	Identify similar sounds	Listening for bird sounds outside
	Making up sentences to talk about sounds	Describing sounds made with various items
Instrumental sounds	Remembering and repeating a rhythm	Pass an instrument and copy the sound made
	Discriminate and reproduce loud and quiet, high and low sounds	Perform different actions to high and low sounds. Make loud or soft sound on cue.
	Start and stop instrument on signal	Mini orchestra
	Choose appropriate words to describe sounds	Encourage discussions to describe sounds
	Match sounds to sources	Which instrument makes this sound?
	Use sounds imaginatively to represent story characters	Listen to and make sound stories
	Express an opinion about what's heard	Listen to a variety of orchestral music and discuss
Body Percussion	Produce contrasts in rhythm, speed and loudness	Variations in a well known song
	Join in with words and actions to familiar songs	Teach a variety of action songs
	Articulate words clearly	As above
	Keep in time with the beat	Movement to music activities
	Make up patterns of sounds using body	Copy the leader activities
	Suggest ideas and create new sounds for a story using body parts	Tell a story and ask for sounds at various times
Rhythm and Rhyme	Join in with simple and complex rhythms	Rhymes and songs using instruments
	Repeat rhythm patterns	Move a rhythm pattern around a circle
	Recognise words that rhyme	Rhyming bingo with pictures
	Produce a word that rhymes with another	Choose an object and make a rhyming word to go with it
	Recognise oddity word that doesn't rhyme	Odd one out games
	Make a series of words that rhyme	Make up silly long names for puppets etc
	Complete a sentence with a rhyming word	Rhyming couplets to complete
Sentences	Sentence segmentation	Counting words in sentences
	Blending words to make a sentence	
	Adding words to a sentence	Exchanging one word in a sentence for another
	Deleting words from a sentence	
Syllables and alliteration	Blend syllables together	Guessing games "I like ice.....cream. What do I like?"
	Syllable segmentation	Counting syllables as they step
	Syllable deletion of a compound word	Guessing games with syllable deletion
	Syllable position recognition	What was the first clap in the word caterpillar.
	Manipulation of syllables in a word	Changing syllables to something else
	Syllable deletion of a multisyllabic word	Guess the picture eg point to the ...penter (carpenter). Take turns to be the one who sets the question
	Make up own alliterative phrases	Tongue twisters, silly poems etc
	Recall the list of objects beginning	Sort the objects into those starting with the same

	with the same sound	sound and those that don't
	Listen for a word or sound in a story and respond	Clap when you hear the sound.....
	Join in with simple and complex rhythms	Rhymes and songs using instruments
	Repeat rhythm patterns	Move a rhythm pattern around a circle
Onset and rime	Blends beginning sound and rest of word	
	Segments word into beginning sound and rest of word	
Oral blending and segmenting	Blend phonemes and recognise word	I spy something that sounds like c...a.....t
	Recognise initial phoneme	Treasure hunt for things beginning with....
	Reproduce initial sounds clearly	Take turns in I spy something beginning with.....
	Recognise final phoneme	I spy something that ends with.....
	Recognise phoneme location	Move to first or last spot depending on sound location
	Recognise phoneme and location	*Listen for 's' in 'neck'*. Hold up *first, last or no.*
	Recognise words with same initial sound	Sorting objects into groups according to sounds
	Recognise words with different initial sounds	As above
	Recognise deleted phoneme	Which sound is missing from 'pot' when I say 'po'

PRE-PRIMARY

	INDIVIDUAL SKILL	EXAMPLE
Oral blending and segmenting	Blend phonemes and recognise word	**I spy something that sounds like c...a.....t**
	Recognise initial phoneme	**Treasure hunt for things beginning with....**
	Reproduce initial sounds clearly	**Take turns in I spy something beginning with.....**
	Recognise final phoneme	**I spy something that ends with.....**
	Recognise phoneme location	**Move to first or last spot depending on sound location**
	Recognise phoneme and location	***Listen for 'n' in 'neck'.*** **Hold up *first, last or no.***
	Recognise words with same initial sound	**Sorting objects into groups according to sounds**
	Recognise words with different initial sounds	**As above**
	Recognise deleted phoneme	**Which sound is missing from 'pot' when I say 'po'**
	Recognise words with same final consonant	**Sort objects according to final consonants e.g. with 'p' or without 'p'**
	Recognise words with different final consonants	**As above**
	Recognise medial phoneme	**Stand up if you hear an 'o' in the middle of 'top'.**
	Count the number of phonemes in a word	**Take the number of counters that represent the number of phonemes in the word *sheep***
	Segment phonemes in a word	**Take it in turns to guess each others 'sound talk' word**
	Delete final phoneme	**Take it in turns to guess the object (say it without last sound)**
	Delete initial phoneme	**As above but without initial sound**
	Delete first consonant of a blend	**As above**
	Delete medial phoneme	**As above but without medial sound**
	Phoneme substitution final	**Play the 'm' game. Let's change everything you see here to end in 'm'**
	Phoneme substitution initial	**As above but change to begin with 'm'**
	Phoneme substitution medial	**As above but everything you see in front of you must be changed to have 'o' in the middle**
	Phoneme reversal	**Back to front day. Reverse objects with 2 phonemes to start with then three**
	Adding phoneme to CVC word	**What happens when we add a 'c' to the beginning of lap? What happens when we put an 's' at the end of pig.**

PRE-PRIMARY (cont)

Graphophonics	**Recall, recognise and write letter sounds**	**Words to blend and segment** High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall*** ***Tricky words in red are for spelling*** **Compound words**	
	s	**at**, sat, pat, tap, sap	High freq. words **in bold** need quick recall
	a		
	t		
	p		
	i	**it**, **is,** sit, sat, pit, tip, pip, sip	
	n	**an, in,** nip, pan, pin, tin, tan, nap	
	m	am, man, mam, mat, map, Pam, Tim, Sam	
	d	**dad,** sad, dim, dip, din, did, Sid, **and**	
	g	tag, gag, gig, gap, nag, sag, gas, pig, dig	
	o	**got, on, not,** pot, top, dog, pop, God, Mog	
	c	**can**, cot, cop, cap, cat, cod	
	k	kid, kit, Kim, Ken	
	ck	***to*** kick, sock, sack, dock, pick, sick, pack, ticket, pocket	***Tricky or irregular words need quick recall***
	e	**get**, pet, ten, net, pen, peg, met, men, neck	
	u	***the***, **up, mum**, run, mug, cup, sun, tuck, mud, sunset	
	r	rim, rip, ram, rat, rag, rug, rot, rocket, carrot	**Begin reading captions with meaning**
	h	**had, him, his,** hot, hut, hop, hum, hit, hat, has, hack, hug	
	b	***no*** **but, big, back**, bet, bad, bag, bed, bud, beg, bug, bun, bus, Ben, bat, bit, bucket, beckon, rabbit	
	f, ff	***go*** **of, if, off,** fit, fun, fig, fog, puff, huff, cuff, fan, fat	
	l, ll	lap, let, leg, lot, lit, bell, fill, doll, tell, sell, Bill, Nell, dull, laptop	
	ss	***I,*** **ass,** less, hiss, mass, mess, boss, fuss, hiss, pass, kiss, Tess, fusspot	
	j	jam, Jill, jet, jog, Jack, Jen, **jet-lag, jacket**	
	v	van, vat, vet, Vic, Ravi, **Kevin, visit, velvet**	
	w	**will**, win, wag, web, wig, wax, **cobweb, wicked** **Begin reading sentences and books**	
	x	***he***, mix, fix, box, tax, six, **taxi, vixen, exit**	
	y	***the,*** yap, yes, yet, yell, **yum-yum**	
	z,zz	***she,*** zip, Zak, buzz, jazz, **zigzag**	
	qu	***to,*** quiz, quit, quick, quack, **liquid**	

YEAR ONE PHONICS SEQUENCE

Week	Letter sounds for recall, recognise and write	Words for blending and segmenting High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall*** ***Tricky words in red are for spelling*** **Compound words**	Ongoing skill practice	Spelling/morph
1	S	**at**, sat, pat, tap, sap	**Identify position of sounds and manipulate sounds**	Distinguish between types of sounds: breath, voice, long, short etc
	a			
	t			
	p			
2	i	**it, is,** sit, sat, pit, tip, pip, sip		
	n	**an, in,** nip, pan, pin, tin, tan, nap		
	m	am, man, mam, mat, map, Pam, Tim, Sam		
	d	**dad,** sad, dim, dip, din, did, Sid, **and**		
3	g	tag, gag, gig, gap, nag, sag, gas, pig, dig		
	o	**got, on, not,** pot, top, dog, pop, God, Mog		
	c	**can**, cot, cop, cap, cat, cod		
	k	kid, kit, Kim, Ken		
4	ck	***to*** kick, sock, sack, dock, pick, sick, pack, ticket, pocket		ack, eck, ick, ock, uck (short vowel and ck)
	e	**get**, pet, ten, net, pen, peg, met, men, neck		
	u	***the***, **up, mum**, run, mug, cup, sun, tuck, mud, sunset		
	r	rim, rip, ram, rat, rag, rug, rot, rocket, carrot		
5	h	**had, him, his,** hot, hut, hop, hum, hit, hat, has, hack, hug	**Begin reading captions with meaning**	
	b	***no*** **but, big, back**, bet, bad, bag, bed, bud, beg, bug, bun, bus, Ben, bat, bit, bucket, beckon, rabbit		
	f, ff	***go*** **of, if, off,** fit, fun, fig, fog, puff, huff, cuff, fan, fat		'ff' at end after short vowel
	l, ll	lap, let, leg, lot, lit, bell, fill, doll, tell, sell, Bill, Nell, dull, laptop		'll' after short vowel on end
6	ss	***I,*** **ass,** less, hiss, mass, mess, boss, fuss, hiss, pass, kiss, Tess, fusspot		'ss' after a short vowel
	j	jam, Jill, jet, jog, Jack, Jen, **jet-lag, jacket**		
	v	van, vat, vet, Vic, Ravi, **Kevin, visit, velvet**		'v' sound on end of words needs to be spelt 've'
	w	**will**, win, wag, web, wig, wax, **cobweb, wicked**	**Introduction to reading sentences and books**	
7	x	***he***, mix, fix, box, tax, six, **taxi, vixen, exit**		
	y	***the,*** yap, yes, yet, yell, **yum-yum**		
	z,zz	***she,*** zip, Zak, buzz, jazz, **zigzag**		
	qu	***to,*** quiz, quit, quick, quack, **liquid**		Begin focus on letter names
Pace should be reduced at about this point	ch	***we,*** chop, chin, chug, check, such, chip, chill much, rich, **chicken**		
	sh	ship, shop, shed, shell, fish, shock, cash, bash, hush, rush	**Introduction to writing sentences**	
	th	***me,*** **them, then, that, this, with,** moth, thin, thick		
	ng	***be,*** ring, rang, hang, song, wing, rung, king, long, sing, **ping-pong**		

YEAR ONE PHONICS SEQUENCE (cont)				
Week	**Letter sounds for recall, recognise and write**	**Words for blending and segmenting** High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	**Ongoing skill practice**	
8	ai	***was,*** wait, Gail, hail, pain, aim, sail, main, tail, rain, bait	**Continue with sentences, book reading, sentence writing and phoneme manipulation**	Discuss long and short vowel sounds
	ee	**see,** feel, weep, feet, jeep, seem, meet, week, deep, keep		
	igh	***no,*** high, sigh, light, might, night, right, sight, fight, tight, **tonight**		
	oa	***go,*** **coat,** load, goat, loaf, road, soap, oak, toad, foal, **boatman**		
9	oo	***my,*** **too,** zoo, boot, hoof, zoom, cool, food, root, moon, rooftop **look**, foot, cook, good, book, took, wood, wool, hook, hood		
	ar	bar, car, bark, card, cart, hard, jar, park, **market, farmyard**		
	or	**for**, fork, cord, cork, sort, born, worn, fort, torn, **cornet**		
	ur	fur, burn, urn, burp, curl, hurt, surf, turn, **turnip**, curds		
10	ow	***you,*** **now**, down, owl, cow, how, bow, pow!, row, town, **towel**		**Meaning of ing and use and use of 's' for present tense**
	oi	oil, boil, coin, coil, join, soil, toil, quoit, **poison, tinfoil**		
	ear	ear, dear, fear, hear, gear, near, tear, year, rear, beard		
	air	air, fair, hair, lair, pair, cairn		
11	er	***her, they,*** **hammer, letter, rocker, ladder, supper, dinner, boxer, better, summer, banner**		
12	Revise all	***all***		**Using ing; doubling for CVC last 3 letters**
13	Revise are	***Are***		
14	Revise all			
15 and 16	s a t p l n m d g o c k ck e u r h b f ff l ll ss j v w x y z zz qu ch sh th ai oa oo ur oi	CVCC words tent, belt, band, land, hand, dent, felt, hump, gulp, lamp, camp, damp, champ, best, nest, sink, link, wind, limp, chimp, bust, gust, bunk, chunk, lift, gift, hunt, pond, fond, tusk, husk, cost, lost, tilt, tuft, kept, soft, bank, next, milk, golf, jump, fact, melt, chest, tenth, theft, Welsh, bench, sixth, punch, thank, shift, shelf, joint, boost, thump, paint, roast, toast, beast, think, burnt, **went, it's, help, just**, ***said, so, he, she, we, me, be,***	**Strong focus on sound manipulation**	
17 and 18	s a t p i n m d g o c k ck e u r h b f ff l ll ss j v w x y z zz qu ee ear oi ai ea ow ar air ng oa or	CCVC words stop, spot , frog , step, plan, speck, trip, grab, track, spin, flag, grip, glad, twin, sniff, plum, gran, swim, clap, drop, green , fresh, steep, tree , spear, smell, spoil, train, spoon, sport, thrush, trash, start, flair, trail, cream, clown, star, creep, brown, stair, spark, bring, crash, bleed, clear, train, swing, droop, spoon, float, smart, groan, brush, growl, scoop, sport , frown, speech, smear, thrill , **treetop , starlight , floating, freshness** **from, *have, like, some, come, were, there, little, one, was, you, they, all, are***	**Strong focus on sound manipulation**	**ck, eck, ick, uck and spark etc (long vowel then k)**
19 and 20	s a t p i n m d g o c k ck e u r h b f ff l ll ss j v w x y z zz qu ch sh th ng	CCVCC, CCCVC, CCCVCC words stand , crisp, trend, trust, spend, glint, twist, brand, frost, cramp, plump, stamp, blend, stunt, crust, tramp, grunt, crept, drift, slept, skunk , think, thank, blink, drank, blank, trunk , grant, slant, crunch, drench, trench, Grinch, shrink, thrust , spring, strap, string, scrap, street, scrunch, **driftwood, twisting, printer** ***do, when, out, what, my, her***	**Strong focus on sound manipulation**	**Plurals: 's' and 'es' and irregular plurals**

YEAR ONE PHONICS SEQUENCE (cont)

Week	Letter sounds for recall, recognise and write	Words for blending and segmenting High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	Ongoing skill practice	
21 Alternative graphemes	**ay** **day** (recall **ai**)	**day,** play, may, say, stray, clay, spray, tray, **crayon, delay** **usually at end of words**	**Continue with sentences, book reading, sentence writing and phoneme manipulation**	
	ou **out** (recall **ow**)	**out, about**, cloud, scout, found, proud, sprout, sound, **loudest, mountain** ***oh their said so*** **if it's not ow, own, owl then use 'ou'**		
22	**ie** **tie** (recall **igh**)	pie, lie, tie, die, cried, tried, spied, fried, **replied, denied**		**Suffix 'ed' meaning and use: drop e, change y to an i**
	ea **eat** (recall **ee**)	sea, seat, bead, read, meat ,treat, heap, least, **steamy, repeat** ***people Mr have like***		
23	**oy** **boy** (recall **oi**)	boy, toy, joy, **oyster,** Roy, **destroy,** Floyd, **enjoy, royal, annoying** **'oi' used inside words while 'oy' used at the end (generally)**		
	ir **girl** (recall **ur**)	girl, sir, bird, shirt, skirt, birth, third, first, **thirteen, thirsty** ***Mrs looked some come***		
24	**ue** **blue** (recall **oo**)	clue, blue, glue, true, Sue, Prue, rue, flue, **issue, tissue,** cue, due, hue, **venue, value, pursue,** queue, **statue, rescue, argue** ***called asked were there***		**Contractions: it's, I'm, he's, she's, can't, don't, aren't, hadn't**
	aw **saw** (recall **or**)	**saw**, paw, raw, claw, jaw, lawn, yawn, law, shawl, drawer		

YEAR ONE PHONICS SEQUENCE (cont)

Week	Letter sounds for recall, recognise and write	Words for blending and segmenting High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	Ongoing skill practice	
25	**oe toe (recall oa)**	toe, hoe, doe, foe, woe, Joe, goes, **tomatoes, potatoes, heroes** ***again thought do when***	**Continue with sentences, book reading, sentence writing and phoneme manipulation**	
	ph photo (recall f)	**Philip, Philippa, phonics**, sphinx, **Christopher, dolphin, prophet, phantom, elephant, alphabet** ***water where who little one***		**Building word families eg play, played, playground**
26	**ew new (recall oo, ue)**	blew, chew, grew, drew, screw, crew, brew, flew, threw, **Andrew,** stew, few, new, dew, pew, knew, **mildew, nephew, renew, Matthew**		
	au Paul (recall or, aw)	Paul, haul, daub, launch, **haunted, August, jaunty, author, automatic**		
27	**e-e these (recall ea, ee)**	these, Pete, Eve, Steve, **even**, theme, gene, scene, **complete, extreme**		**'e' at end makes the name of the vowel**
	o-e home (recall oa, oe)	bone, pole, home, alone, those, stone, woke, note, **explode, envelope** ***through work what out***		
28	**a-e make (recall ai, ay)**	came, made, make, take, game, race, same, snake, amaze, escape		
	i-e like (recall ie, igh)	like, time, pine, ripe, shine, slide, prize, nice, invite, inside		
29	**u-e cube rule**	huge, cube, tube, use, **computer** June, ***mouse many different oh their*** **Discuss subtle difference between 'u..e' in huge and June**		
	y-e style	Type, style, rhyme Discuss how silent 'e' makes 'y' say /i/ as in type and style etc		
30	**tch (recall ch)**	Batch, witch, match, fetch,	**Rule for short vowels with ch sound a, e, i, o. (not u)**	

YEAR TWO PHONICS SEQUENCE

Need to incorporate a revision term (see previous year's sequence). Shift focus from synthetic to analytic approach as year progresses

Week	Letter sounds for recall, recognise and write	Words for blending and segmenting High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	Ongoing skill practice
1 Alternative pronunciations	**ea eat** **bread**	sea head, dead, deaf, read, bread, **heaven, feather, pleasant, instead, breakfast**	**Focus on identification of words or letter combinations that look the same but sound different** **Revise plurals: s, es, different words (goose, geese), same word (fish, fish)** **Homographs: read and read**
	er farmer **her**	**farmer** **her**, fern, stern, **Gerda**, herbs, **jerky, perky, Bernard, servant, permanent** ***laughed because please people Mr***	**Suffix 'er' – meaning of and application using changing 'y' to an 'i' rule except when vowel before 'y'. Also dropping 'e' on end rule.**
2	**u but** **put** **y yes** **by** **very**	but **put,** pull, push, full, bush, bull, **cushion, awful, playful, pudding** **by, my**, try, why, dry, fry, sky, spy, **reply** **very, happy, funny, carry, hairy, smelly, penny, crunchy, lolly, merrily** ***any eyes Mrs looked***	**Contractions : here's, where's, what's, who's** **Explain that 'y' can be like a consonant and a vowel.**
3	**ch chin** **school** **chef**	chin school, **Christmas, chemist**, chord, chorus, Chris, **chronic, chemical, headache, technical** chef, **Charlene, Chandry, Charlotte, machine, brochure, chalet** ***called asked***	**Suffix 'est' – meaning of and application including previous rules**
	ou out **you** **could** **shoulder**	out **you**, soup, group **could**, would, should mould, **shoulder, boulder** ***friends once***	
4	**ow cow** **blow**	down low, grow, snow, glow, bowl, tow, show, slow, **window, rowing-boat**	**Suffix 'ness' – meaning of and application including previous rules**
	ie tie **field**	pie chief, brief, field, shield, priest, yield, shriek, thief, **relief, belief**	**Contractions – I'll, you'll, he'll, she'll, we'll, they'll**
	a hat **what**	Hat ***again, thought*** was, what, wash, wasp, squad, squash, want, watch, **wallet, wander**	**Rule: The letter 'w' changes the 'a' to 'o'**
5	**c cat** **cent**	cat cell, **central,** acid, **cycle, icy**, cent, **Cynthia, success, December, accent**	**Prefix 'un' – meaning and use** **Rule: 'i' or 'e' after 'c' say 's'**
	g got **giant**	Got ***water, where*** gent, gym, gem, Gill, **gentle, ginger, Egypt, magic, danger, energy**	**Rule: 'i' or 'e' after g say 'j'**
6	**i tin** **find**	tin mind, find, wild, pint, blind, child, kind, grind, **behind, remind**	**Prefix 'pre' – meaning and use**
	o hot **cold** **shove**	Hot ***who, through*** **no, so, go, old, don't**, gold, cold, told, both, hold love, above, dove	**Contractions – I'd, you'd, he'd, she'd, they'd**
7	**wh which** **who**	**when, what,** where, why, **whistle, whenever**, wheel, **whisper**, white who, whose, whole, whom, **whoever**	**Prefix 'mis' – meaning and use**
	a hat **what** **father**	Hat ***work, many*** was, what, wash, wasp, squad, squash, want, watch, **wallet, wander** **rather, last, past, grass, afternoon**	**Rule: The letter 'w' changes the 'a' to 'o'**

YEAR TWO PHONICS SEQUENCE (cont)

Week will depend on children's progress	**Grouping graphemes by sound**	**Words for blending and segmenting** High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	**Skills/Morphographic knowledge**
	ey **ay** **ai** **a...e**	they, grey, obey, prey, survey see previous list see previous list see previous list ***again different***	**Homophones: mane, main; plane, plain; pain, pane**
	dge **j** **ge/gi**	Fudge, hedge, bridge, ledge, nudge, badge, lodge, podgy, badger, dodging see previous list see previous list	**Rule: adge, edge, idge, odge, udge – short vowel and 'j' sound**
	mb **m**	lamb, limb, comb, climb, crumb, dumb, thumb, numb, plumbing see previous list	**Silent letters**
	ou (recall **ow**)	**out, about**, cloud, scout, found, proud, sprout, sound, **loudest, mountain** ***oh their said so*** **if it's not ow, own, owl then use 'ou'**	**Suffix: less – revise rule for adding a suffix that starts with a consonant**
	ie **y** **igh**	pie, lie, tie, die, cried, tried, spied, fried, **replied, denied** by, my, try, why, dry, fry, sky, spy, deny, reply as previous list ***laughed***	
	o **u**	some, come, done, none, son, nothing, month, mother, worry, brother see previous list ***Mrs looked some come***	**Homophones: son, sun**
	ea **eat** **e...e** **ie** **ey** **y**	see previous list see previous list see previous list donkey, key, valley, monkey, chimney, trolley, pulley, Lesley, see previous list ***people Mr have like***	**Suffix: y** **Homophones: piece, peace**
	oy **boy** **oi**	boy, toy, joy, **oyster,** Roy, **destroy,** Floyd, **enjoy, royal, annoying** **'oi' used inside words while 'oy' used at the end (generally)** ***because, please***	
	ir **ur** **ear** **or**	girl, sir, bird, shirt, skirt, birth, third, first, **thirteen, thirsty** see previous list earth, earn, learn, pearl, heard, search, rehearsal word, work, world, worm, worth, worse, worship, worthy, worst ***were***	**Suffix: ly** **Homophones: herd, heard**

YEAR TWO PHONICS SEQUENCE

Week will depend on children's progress	**Letter sounds for recall, recognise and write**	**Words for blending and segmenting** High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	**Morphographic knowledge**
	our **aw** **au** **or**	four, pour, **your,** court, fourth, mourn, **fourteen, tournament** see previous list see previous list see previous list ***thought any***	**Build word families using taught prefixes and suffixes** **Homophones: four, fore and for** **caught, court** **poor, pore, pour**
	oe **ow** **oa** **o...e**	previous list previous list previous list see previous list ***do when***	**Build word families using taught prefixes and suffixes** **Homophones: toe and tow**
	ear **are** **air**	pear, bear, wear, tear, swear bare, care, dare, fare, hare, mare, square, scare, stare, share see previous list ***where eyes***	**Build word families using taught prefixes and suffixes** **Homophones: bear, bare** **stair, stare** **wear, where**
	z **se**	previous list please, tease, ease, rouse, browse, cheese, noise, pause, blouse, because	**Build word families using taught prefixes and suffixes**
	oo **u** **oul**	previous list previous list could, would, should ***friends***	**Build word families using taught prefixes and suffixes** **Homophones: would, wood** **full, fool**
	eer **ere** **ear**	beer, deer, jeer, cheer, peer, sneer, sheer, veer, career, steering **here,** mere, severe, interfere, adhere previous list ***once***	

YEAR THREE PHONICS

Lesson components: Visual - recognising sounds, recognising visually words from passages with particular sounds, recognising visually misspelt words; **Auditory** – recognising words with particular sounds when read; **Pronunciation –** breaking words into individual sounds, chunking, breaking words into meaning units or morpoghraphic parts

Week	Letter sounds for recall, recognise and write	Words for blending and segmenting High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	Morphographic knowledge
	eigh **a** **ei** **ai** **ay** **a..e**	neighbour, neigh, weight, sleigh two syllables, open: lazy, bacon, basic, able, famous, danger, baby, agent vein, rein see previous see previous see previous	**Revise suffix ing including doubling rule and dropping e rule.** **Homophones: faint, feint**
	a	Backpack, advance, transplant, handbag	**Prefix: pre** **Homophones: great/grate**
	c **ck** **k** **ch** **cc**	At beginning of sounds and end of syllables in multisyllabic words: picnic Revise ack, eck, ick, ock, uck rule – tricky, reckless, stocky, lipstick, hockey Beginning of words and see above rule - Christian, ache, echo, chlorine, chrome, scheme Hiccup, occur, soccer, accuse, raccoon	**Revise suffix ed including sorting by sound walked /t/, wagged /d/ shouted /ed/. Revise rules for applying ed.** **Homophones: chord/cord**
	ea **e** **ai** **a**	See previous list plus headache, meadow, peasant, jealous, sweatshirt etc again, against, fountain, bargain, certain, portrait many, any, anybody	**Revise suffix er** **Homophones bred, bread** **Compound words anybody, anywhere, anyone, anyplace, anything etc**
	ee **ea** **i**	 Machine, sardine, marine, margarine, trampoline	**Revise prefix un** **Homophones creek, creak** **Compound words beginning with sea eg seasick, seafood, seagull, seashore etc**
	f **ff** **ph**	Any appropriate eg farm Scruff, offend, offspring, affair, affect, afford, traffic, suffix Sphere, graph, dolphin, orphan, nephew, pamphlet, trophy alphabet, autograph	**Revise suffix est** **Homophones rough, ruff** **Compound words beginning or ending with foot: foothold, footstep, barefoot, footstool etc**
	g **gg** **gh** **gu** **gue**	any appropriate eg gown maggot, giggle, nugget, sluggish, struggle ghost, spaghetti, ghostly, ghastly guard, guess, guide, disguise, guilty, guitar league, plague, rogue, vague, fatigue, intrigue, dialogue rogue	**Revise suffix ly including changing y to an i rule.** **Homophones guessed, guest** **Compound words beginning with grand eg grandmother, grandson etc**
	l **y**	Picnic, kitchen, invent, children etc Gym, cylinder, gypsy, mystery, bicycle, oxygen, crystal	**Revise suffix less** **Homophones it's, its** **Compound words beginning with**
	igh **y** **i..e** **i** **ie**	Revise previous lists but build prefixes and suffixes onto these	**Revise suffix ness** **Homophones aisle, I'll, isle** **Compound words beginning with eye eg eyeball, eyebrow, eyelash, eyelid etc**
	J **g** **ge** **dge**	Jockey, jumbo etc Germ, gently, giant, gymnast, danger, magic, rigid Bulge, strange, scrounge, lounge, package Pledge, smudge, trudge, knowledge, porridge, gadget, midget	**Revise rule: g makes /j/ in front of e, i or y (some exceptions)** **Homophones: genes, jeans**

YEAR THREE PHONICS cont			
Week	**Sounds**	**Words**	**Morphographic knowledge**
	m **mm** **me** **mb** **mn**	myth, meant, merge etc command, common, immense, mammoth, hammock, comment become, somehow, welcome, overcome, somebody, income bomb, thumb, comb, plumber, climb, lamb, dumb, tomb hymn, autumn, column, solemn	**Revise suffix y** **Homophones: mall, maul** **Compound words beginning or ending with man eg manmade, handyman, policeman, snowman, mailman**
	n **nn** **ne** **gn** **kn**	notch, noose, nurse, hound etc bonnet, connect, banner, dinner, flannel, spanner, innocent done, gone, examine, heroine, anyone gnome, reign, gnaw, design, assignment knead, kneel, knight, know, knowledge, knuckle	**Revise prefix un** **Homophones: knead, need** **Compound words beginning or ending with night eg nightmare, nighttime, nightgown**
	ng **n**	strength, kingdom, swung, offspring, all the ing words skunk, drunk, blanket, bingo, sprinkle, triangle	**Revise prefix mis** **Homophones: knows, nose** **Compound words beginning or ending with nut eg nutcracker, nutshell**
	oa **o** **ow** **o...e** **oe**	See previous lists and build prefixes and suffixes onto these words	**Prefix re** **Homophones: loan, lone** **Compound words beginning with over eg overhead, overflow, overcome, overboard etc**
	augh **ar** **oar** **ore** **oor** **our** **or** **au** **aw**	caught, taught, naughty, daughter dwarf soar, boar, roar, oar ore, bore, pore, core, fore, more, lore, sore, tore, wore floor, door moor etc See previous lists and build prefixes and suffixes onto these words	**Prefix dis** **Homophones: course, coarse** **Compound words beginning with door eg doorman, doorknob, doorway, doormat**
	oo **o** **ou** **ew** **ui** **ue**	See previous plus: toothpaste, moody, gloomy Movement, movie, tonight, today Coupon, tourism, tourist Previous list Suitcase gruesome	**Prefix non** **Homophones: root, route** **Compound words beginning or ending with news eg newsletter, newspaper, newspaperman, newsreel**
	oi **oy**	moisture, poison, toilet, loiter boycott, destroy, voyage	**Prefixes: uni, bi, tri – meaning and application**
	s **ss** **sc** **st** **se** **c**	Any 's' word Lesson, stress, actress, massive, address Scissors, descend, muscle, scenery, scientist Christmas, hustle, restless, castle, glisten Coarse, crease, tense, collapse, suspense Circus, accent, concert, saucer, cancer, princess	**Suffix: ness** **Homophones: seller, cellar** **Compound words beginning with some eg somewhere, somehow, sometime, something, someday etc**
	sh **ti** **ci** **si** **ch** **s ss**	Shrivel, shuffle, shimmer, perish, starfish, sweatshirt Caution, nation, patient, station, position Ancient, racial, social, special, crucial, precious Mission, passion, mansion, expansion, session Chef, parachute, machine Sugar, sure, issue, tissue	**Prefix: trans** **Homophones: sheer, shear** **Compound words beginning or ending with hand eg secondhand, backhand, handbag etc**
	x **cc**	box etc Succeed, accident	**Prefix: non** **Homophones: tacks, tax** **Compound words starting with under**
	z **se** **ss**	capsize, amaze lizard, trapeze, criticize Pause, raise, please, cruise, cause, tease Dessert, possess, scissors, possession	**Prefix: in** **Homophones: browse, brows**

YEAR FOUR PHONICS

Week	Letter sounds for recall, recognise and write	Words for blending and segmenting High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	Morphographic knowledge
	Revise previous long a sound words **Long A sound in 1st syllable** **Long a sound in 2nd syllable**	Vacant, navy, basic, crater, April, radar, wafer, famous (fame + ous), raking Rainbow, painter, dainty, bracelet, pavement, placement, safety, statement Complain, contain, explain, remain, terrain, exclaim, campaign, decay, portray, parade, amaze, vibrate, dictate, erase etc	**Discuss verbs that change when made in the past eg see/saw, grow/grew, know/knew (p345 WTW) instead of adding ed.** **Homophones: rain/reign/rein** **Steak/stake** **Way, weigh** **Praise/prays** **Compound words: playhouse, playground, playmate, playpen, playroom, playwright** **Suffix ment e.g. measurement, amazement, embarrassment etc – Discuss suffix joining rules**
	Revise previous short a sound **Short a sound accent in 1st syllable**	Attic, batter, happen, valley, traffic, pattern, fabric, plastic, cactus, chapter, canyon, tadpole, ambush, magic	**Homophones rap/wrap** **Suffix al discuss the meaning (like) and the sound of it (can't hear short a sound). Discuss the rule of adding al after ic when adding ly** **Compound words: landfill, landlady, landlord, landscape, landslide, landmark Handyman, policeman, gentleman, salesman, snowman, fireman**
	Revise previous ar sound words **ar in 1st syllable**	Artist, garden, carpet, harvest, garlic, partner, margin, sharpen, carbon, sparkle, faster, casket, master, nasty,	**Homophones: farther/father** **Past/passed** **Compound words:** **Suffix age and meaning (that which is) (package, usage, marriage) – Discuss rules for adding a suffix that starts with a vowel sound**
	Revise previous air sound words **Air accent in 1st syllable** **Air accent in 2nd syllable**	Stairway, fairway, chairman, careful, parent, barely, barefoot Repair, despair, unfair, impair, prepare, compare, beware, aware,	**Homophones: wear, where, ware** **Compound words: airport, airtight, aircraft, airmail, airline** **Greek root: aero - air**
	Revise long e sounds **Long e in open syllable** **Long e in first syllable** **Long e in second syllable**	even female meter detour prefix evil even neon preview decent Needle cheetah greedy reason reader eastern briefly either ceiling people eagle peanut Fifteen agree supreme stampede disease increase Ideal mislead believe relief deceive apiece	**Prefix de. Revise re and pre** **Homophones: scene, seen** **Compound words: seaweed, seashore, seagull, seafood, seaside** **Greek root: tele - far**

YEAR FOUR PHONICS (cont)			
	Letter sounds for recall, recognise and write	**Words for blending and segmenting** High freq. words **in bold** need quick recall ***Tricky or irregular words (in italics) need quick recall***	**Morphographic knowledge**
	Revise short e sounds **Short e first syllable**	Better, pencil, centre, sentence, twenty Select, metal, never, denim, melon, seven, credit, feather, weapon, health	**Prefix en- enforce, endure, engage** **Homophones: retch/wretch** **led/lead whether/weather** **Compound words: Headlight, headline, headband**
	Revise long i sounds **Long i in an open syllable** **Long i sound first syllable** **Long i in the second syllable** **Short i in the first syllable**	 Pilot, tiger, writer, pirate, Friday, spider, private, icy, title, item Ninety, fighter, lively, tighten, wildcat Climber, kindness, cycle Polite, decide, combine, excite, reptile Tonight, resign, design, unkind, rewind Little, kitten, skinny, fifty, windy City, visit, sister, finish, mixture	**Suffix -ile infantile, futile,** **Homophone – liar/lyre** **dye/die** **Compound words: lightheaded, lighthearted, lighthouse**
	Revise previous long o **Long o in an open syllable** **Long o accent in 1st** **Long o accent in 2nd**	Robot, pony, motor, notice, ocean Poem, hoping, frozen, chosen, solar Hopeful, closely, toaster, coastal, soapy Owner, mower, snowing, soldier, postage Molten, moulding, folder Alone, explode, dispose, compose, approach, disown, afloat, erode, awoke	**prefix – mono –monologue, monotone, monosyllable** **co co-operate, co-worker** **homophones – woe/whoa** **yoke/yolk** **groan/grown** **mode/mowed** **compound- showdown, showoff, showcase**
	Revise short o words **Short o accent in first**	 Follow, copper, blossom, cottage, bottle, nozzle, cotton, popcorn, contest, costume, bonfire, problem	**suffix- ology biology geology,** **con/com—contact, comfort, combine**
	or sound in first syllable **or in second syllable**	Morning, shortage, fortress, portrait, northern, florist, boredom, shoreline, hoarsely, fourteen, foursome Report, record, perform, afford, absorb	**Prefix fore – forearm, forecast, foretell, foresee, foresight, forehand, forehead, foreman, forethought, foremost**
	Revise long u in an open syllable **Long u in the first syllable** **Long u in second syllable**	Music , ruby, pupil, future, unit, fuel July, ruler, bugle, human, tuna, annual Useful, Tuesday, juicy Amuse, reduce, excuse, pollute	**Prefix – super: superpower, supervision, supermarket, supernatural, superman, superstition, superficial, supersonic.**
	Revise short u in first syllable	Supper, funny, tunnel, puzzle, ugly, Husband, number, umpire, under, hungry Upon, punish, public, study	**Prefix sub – subtract, subterranean, suburban, substitute**
	er/ur/or/ir/ear in first syllable	Person, perfect, sermon, serpent, thermos, sherbet, mermaid, purpose, further, furnish, turkey, worker, worthy, worship, firmly, thirsty, circle, virtue, stirrup, skirmish, early, earnest, research	**Prefix – inter: interact, interrupt, interfere, interject, interchange, interloper.**

APPENDIX C

ORAL LANGUAGE ASSESSMENT

Name: _____ Age: _____

Date: _____ Grade: _____

Set 1
TYPE

1	*The puppy's tail* is curly.	
2	*Mummy* is making a cake.	
3	*The teacher told them* a story.	
4	*There are the children*.	
5	*She's eating her lunch* slowly.	

Set 2 **total**
TYPE

1	*That red bike over there* used to be *my uncle's.*	
2	*The girl in the car* is waving *her hand*.	
3	*Over the weekend* Jade brought us some biscuits.	
4	*Here are the machines that dig* the big holes.	
5	*The bird built a nest* up in the tree.	

Set 3 **total**
TYPE

1	*Be ready to come inside* when the bell rings.	
2	*The car and the truck* were carrying *some large boxes*.	
3	*The brave fireman* showed our class *the big red truck*.	
4	*There are the men* who clean the playground *at our school*.	
5	*My friend likes to sleep* at my house *in the Christmas holidays*.	

TOTAL SCORE

Crevola, C. and Vineis, M. (2004). Assessment and instructional pacing. New York: Mondo Publishing.

Oral Language Assessment

About This Assessment

The Oral Language Assessment provides a quick and easy way to determine what structures of oral English students understand and control. This assessment is appropriate for all students in grades K-3. The series of sentences in this assessment reflect *some* of the structures of adult English language that are common to school and classroom settings. The sentences increase in complexity within each set; sentences in Sets 2 and 3 use the identical five language structures as in Set 1, but with increasingly complicated phrases and clauses. This assessment measures a student's *receptive* language. As students repeat sentences of increasing structural complexity, the teacher notes any substitutions, omissions, transpositions, or expansions of words and phrases that occur when the sentences become too difficult. These observations become the basis for intensive oral-language development. They also help teachers tailor the instructional language used when working directly with these students.

The language structures in this assessment are vital for students to understand if they are to understand classroom instructions, discussions, and stories. In general, students whose first language is English should be able to repeat all 15 sentences correctly in every detail by the age of six.

How to Administer

1. Be certain that you have the student's full attention throughout this assessment. If the student loses focus, reestablish focus before continuing.
2. Read each sentence to the student using the phrasing indicated by the italics. Speak clearly, with natural tone and pace.
3. Familiarize the student with the testing procedure. Tell the student, *I am going to read some sentences and I would like you to say them after me. Let's begin.*
    - *Sally is walking to her house.* OK, try this one.
    - *Where are you going?* OK. Say these ….
4. Begin at Set 1. Administer the sentences in order from 1 to 5. Record the student's repetition of the sentences directly on the scoring sheet, much as one would record a reading record. Continue to Set 2 and Set 3 in the same way.

Scoring and Analyzing

Score one point for each sentence repeated correctly *in every detail.*

Crevola, C. and Vineis, M. (2004). Assessment and instructional pacing. New York: Mondo Publishing.

Score	Stage of language development in relation to reading
0-4	Indicates limited oral English Oral language development should be at the centre of work done with these students; children at this level need extended conversation with fluent language users; they benefit from hearing simple stories read aloud in small group settings; need encouragement to draw on background knowledge to predict what will happen, follow a simple story line and check their predictions with what actually happens
5-7	Indicates development of a stronger command of the structures of oral English Need opportunities to work with simple texts – will be relying mainly on memory and illustrations; need activities that help them articulate their thoughts, have them written down, and then read their own constructions.
8-12	Level of oral language should be able to support emergent reading Children at this level need continued work in oral language development; need to read and reread familiar texts; help them match the written word with the spoken word; develop concepts about print and early letter-sound relationships.
13-15	Level of oral language should be able to support beginning reading Children at this level still require explicit oral language development; the development of text comprehension is dependent on their growing listening comprehension. Provide opportunities for prolonged discussions in small-group settings; read stories to these students in small groups to encourage discussion about the text; continue building sound-letter knowledge

Implications for Instruction

Students with delays in oral English have difficulty because they have to learn so many new things about language at once. When students enter school with language delays as defined by assessment tools such as the Oral Language Assessment, a two-pronged approach is required.

1. One-to-One Conversations

Make sure these students have daily opportunities to engage with adults in two-way conversation. If these students do not have these opportunities, the likelihood of progressing sufficiently to support reading development is greatly diminished. These opportunities are vital to the development of language and learning. This non-threatening environment encourages the risk-taking and trial-and-error that are often impossible in whole-class situations.

2. Small-Group Language Instruction

Include regular opportunities for small-group instruction in story reading, shared reading and oral language activities.

Crevola, C. and Vineis, M. (2004). Assessment and instructional pacing. New York: Mondo Publishing.

SCREEN OF PHONOLOGICAL AWARENESS (SPA)

Stephanie Mallen, Speech Pathologist
Department for Education & Children's Services, SA 1994

Materials: 5 counters of same colour, 1 clicker, 1 shaker, 3 metal keys on a ring, animal figure, picture sheet attached.

NAME: (M/F)_____ D.O.B: / / AGE:_____ DATE: / /

LOCATION: _____ YEAR LEVEL _____ EXAMINER: _____

OTHER FACTORS: ❑ NESB ❑ Hearing impairment ❑ Visual impairment ❑ Identified speech delay/disorder
❑ Identified language delay/disorder ❑ Intellectual disability ❑ Other_____

Instructions *Note: One repetition of each item is permitted*	**Stimulus items**	**Score**
1. Segmenting sentences into words Provide 5 counters. Demonstrate counting words with animal figure jumping on a counter for each word in the sentence, saying: *I am going to say a sentence and I am going to jump on a counter for each word I say.* Practise sentence: *'Get your book.'* Then give the child the animal figure and say: *Now it's your turn.* Repeat practice sentence.	**He is tall. (3)** _____ **Her name is Sue. (4)** _____ **They went shopping.** (3) _____ **Jump off. (2)** _____ **It is my birthday. (4)** _____	/5
2. Providing rhyming words Show the first line of pictures on picture sheet. Point to the pictures as you say them. Say: *These words rhyme because they sound the same at the end: big - pig - fig.* Show the next line of pictures and say: *Now can you tell me a word that rhymes with*_____? Nonsense words are scored as correct. NB. First sound cue acceptable.	**hat - mat -** _____ **eye - pie -** _____ **dog - log -** _____ **pot - cot -** _____ **sun - bun -** _____	/5
3. Blending syllables Provide the correct number of counters for the number of syllables in each word. Demonstrate by pointing to a counter for each syllable and saying, *I am going to say a word and I am going to point to a counter for each beat of 'croc - o - dile'.* Then push them together saying: *That makes crocodile. Now you tell me what word this makes*_____ . Ensure the child is saying the whole word, not repeating the syllables.	**doc - tor** _____ **let - ter** _____ **kan - ga - roo** _____ **grass - hop - per**_____ **hel - i - cop - ter** _____	/5
4. Segmenting syllables Provide 5 counters. Demonstrate counting each syllable with the animal figure jumping on the counters. Say: *I am going to say a word and I am going to jump on a counter for each beat in the word 'elephant': 'el-e-phant'.* Then give the child the animal figure and say *Now it's your turn.* Repeat 'el - e - phant' together first. NB. Score as correct if the child points to the correct number of counters irrespective of the number they say.	**Christmas (2)** _____ **crayon (2)** _____ **butterfly (3)** _____ **computer (3)**_____ **watermelon (4)** _____	/5
5. Reproducing a sound sequence Provide clicker (1), shaker (2), keys (3) in a row from left to right. Demonstrate the noise that each one makes by presenting the sound twice in succession, saying: *This one makes this sound,* etc. Ask the child to close their eyes and listen to the sound sequence (eg 1 - 2 = clicker - shaker). Produce each sound twice, ie two clicks - two shakes etc. After each sequence say: *Now open your eyes. Can you make the sounds in the same order?*	**1 - 3**_____ **2 - 1**_____ **2 - 3 - 1**_____ **3 - 2 - 1** _____ **1 - 3 - 1 - 2**_____	/5
6. Identifying the first sound Demonstrate using the child's name, saying: *Your name is* _____ *That starts with the*_____ *sound. Now can you tell me what sound this word starts with?* If letter name is given, prompt the 'sound' saying: *That's the name of the letter. Do you know what sound it makes?* Score sound only as correct.	**(t)ail**_____ **(m)an** _____ **(f)ine** _____ **(l)ion** _____ **(s)un** _____	/5

7. Blending sounds
Provide the correct number of counters for the number of sounds in the word. Demonstrate by pointing to a counter for each sound and saying, *I am going to say a word and I am going to point to a counter for each sound in* 'h - a - t'. Then push them together saying: *That makes hat. Now can you tell me what word thesesounds make?* NB. Be very careful to say each sound as it sounds in that word, eg [b] not 'bee',[ay] not 'a', [l] not 'ell', etc.

b - i - g _____
c - ou - gh _____
h - o - me _____
w - e - n - t _____
t - a - b - le _____

/5

8. Producing multisyllabic words
Say: *I want you to say these words after me.*
NB. Characteristic speech errors are marked correct. Score on sound sequence and syllable structure, given in brackets opposite. Transcribe error responses to score later if unsure.

octopus (3) _____
ambulance (3) _____
television (4) _____
rhinoceros (4) _____
hippopotamus (5) _____

/5

9. Repairing sentences
Say: I'm going to say a silly sentence that has got one sound wrong, like 'We went for a swim in the dool' when it should be 'We went for a swim in the pool'. Now I want to see if you can fix these up for me.
Speech errors are marked correct.

Wipe your peet (feet) before you go inside. _____
They caught the but (bus) to school. _____
We took the shog (dog) for a walk. _____
He was reading a boof (book). _____
She had a birmday (birthday) party. _____

/5

10. Letter recognition
Point to the letters below one at a time. Demonstrate with 'c' saying:
This is the letter 'see'. It also makes the 'k' sound. Do you know the name of these letters?
Note whether letter name (L) or sound (S) is given. Score both correct.

c a k b s e

a _____
k _____
b _____
s _____
e _____

/5

TOTAL SCORE	Wd Seg	Rhyme	Syll Bl	Syll Seg	Sd Sq	1st Sd	Sd Bl	Msyll	Repair	Lt Rec	/50
	/5	/5	/5	/5	/5	/5	/5	/5	/5	/5	

Optional supplementary test—sound segmentation
Do only if child performed well on the above screening test as a measure of skill level.

Provide 5 counters. Demonstrate with the animal figure jumping on the counters for each sound in 'man', saying: *'Man' has three sounds: m - a - n.* Give the child the animal figure and say: *Can you tell me what sounds you can hear in these words?*
Score on the accuracy of the sounds given.

me (2) _____
no (2) _____
dog (3) _____
run (3) _____
stop (4) _____

/5

Summary / Comments

Assessor:

Alphacheck

Directions for Administering

Place the large print student sheets and word lists in front of the student. Use the Alphacheck recording form to record student responses. Create an encouraging and positive tone throughout the testing but do not prompt students' responses.

Begin with the single letters 's' through to 'q', asking students to identify the name of each letter. Tick (✓) or cross (x) each box to record responses.

Present each single letter again, along with the double consonants and consonant digraphs asking students to now identify the sounds (phonemes). Tick (✓) or cross (x) each box to record responses. Do not ask the sound for 'q".

Continue testing with each list of words. Tick (✓) words which have been pronounced correctly. If an attempt is incorrect, record the student's response; for example if the students reads "hick" for hitch. Discontinue testing when the student makes four consecutive errors in a list. Have the student sample words in each category, unless it is evident that they reached their level of difficulty or expected knowledge. Indicate where you have stopped testing in each word list.

Fogarty Foundation
Creating opportunity, realising potential.

Assessor:

Alphacheck Recording Form

Student name _____ DOB _____ Date _____

Letter(s)	s	a	t	p	i	n	m	d	g	o	c	k	e	u	r	h	b	f
Name																		
Sound																		

Letter(s)	l	j	v	w	x	y	z	q	ff	ll	ss	zz	ck	ch	sh	th	wh	ph
Name																		
Sound																		

up		best		chin		Pete		stain		care		sundress		was		nef		
yes		grin		rash		size		fly		sir		picnic		castle		stup		
jet		flag		thick		late		tied		surf		umbrella		their		lith		
ran		hump		graph		cube		way		park		quicksand		should		pabe		
cut		trip		hitch		bone		toe		deer		backpack		gnome		leam		
kid		spell		shut		mule		seal		hair		endless		wring		garl		
bed		blink		bath		home		bowl		term		lunchbox		said		ched		
map		swim		whip		tide		green		born		blastoff		know		quird		
dig		melt		inch		age		soap		pear		uphill		nature		zumgiv		
fox		tent		then		eve		aid		art		chopstick		lamb		nixwok		

VC CVC		Consonant blends		Consonant digraphs/ trigraph		Long vowels: silent e		Long vowel graphemes		Vowel/consonant digraphs/ trigraphs		Multisyllabic words		Irregular vowel and consonant spellings		Non-word examples		

Assessor:

Alphacheck
Student sheet

↓					
s	m	e	l	z	ck
a	d	u	j	q	ch
t	g	r	v	ff	sh
p	o	h	w	ll	th
i	c	b	x	ss	wh
n	k	f	y	zz	ph

Assessor:

Alphacheck
Word lists

up	best	chin
yes	grin	rash
jet	flag	thick
ran	hump	graph
cut	trip	hitch
kid	spell	shut
bed	blink	bath
map	swim	whip
dig	melt	inch
fox	tent	then

Assessor:

Pete	stain	care
size	fly	sir
late	tied	surf
cube	way	park
bone	toe	deer
mule	seal	hair
home	bowl	term
tide	green	born
age	soap	pear
eve	aid	art

Assessor:

sundress	was	nef
picnic	castle	stup
umbrella	their	lith
quicksand	should	pabe
backpack	gnome	leam
endless	wring	garl
lunchbox	said	ched
blastoff	know	quird
uphill	nature	zumgiv
chopstick	lamb	nixwok

APPENDIX F

Participant Coded Name:_____
Role in school (teacher/SSO, etc)_____

YMN LITERACY PROJECT
Survey of Literacy Knowledge and Beliefs

1. Vocabulary knowledge on school entry is one of the strongest predictors of future reading ability.

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree

2. The teaching of phonic elements of reading should always be based within meaningful text.

SD	D	NS	A	SA

3. Assessment should primarily be carried out to inform future planning for student learning.

SD	D	NS	A	SA

4. Students must attain automaticity of the basic elements of reading if they are to be successful in comprehending text.

SD	D	NS	A	SA

5. Phonological awareness refers to an awareness of the relationship between letters and sounds.

SD	D	NS	A	SA

6. Books with predictable text are a useful resource for students to practise early reading skills like blending.

SD	D	NS	A	SA

7. The use of context is more helpful than letter-sound knowledge from the earliest stages of learning to read.

SD	D	NS	A	SA

Participant Coded Name:_____
Role in school (teacher/SSO, etc)_____

8. Children learn to read in much the same way as they learn to talk.

SD	D	NS	A	SA

9. Fluent readers do not need precise decoding skills as they are able to make meaning from other cues.

SD	D	NS	A	SA

10. Effective teaching of reading requires specific instruction of skills such as vocabulary, fluency, phonics and comprehension.

SD	D	NS	A	SA

11. Sustained silent reading is a vital part of every reading program as it models best practice.

SD	D	NS	A	SA

12. Teaching spelling is not useful because the English language is too inconsistent.

SD	D	NS	A	SA

13. Decodable readers are a useful resource for students to practise early reading skills.

.

SD	D	NS	A	SA

14. Students who are significantly behind in reading benefit from being withdrawn from most literacy lessons for a different program because they are gaining very little from being in the mainstream class.

SD	D	NS	A	SA

15. Most beginning readers need explicit and systematic teaching of phonics.

SD	D	NS	A	SA

Participant Coded Name:_____
Role in school (teacher/SSO, etc)_____

16. Teachers must give more time to struggling students if they are to succeed.

SD	D	NS	A	SA

17. Schools should have standardised assessments for all year levels in reading.

SD	D	NS	A	SA

18. Daily lesson planning is essential in literacy.

SD	D	NS	A	SA

19. Each school should have a literacy expert to teach students with severe reading problems.

SD	D	NS	A	SA

20. Teacher judgement is not as valuable as standardised assessment of reading ability.

SD	D	NS	A	SA

21. Teaching morphemes is an inefficient way to teach vocabulary.

SD	D	NS	A	SA

22. There is a progression of skills in the development of phonological awareness.

SD	D	NS	A	SA

Participant Coded Name:_____
Role in school (teacher/SSO, etc)_____

23. The conventions of conversation and oral interaction need to be explicitly taught to some children.

SD	D	NS	A	SA

24. Text type (genre) has an effect on reading comprehension.

SD	D	NS	A	SA

25. Fluent reading is a component of comprehension.

SD	D	NS	A	SA

Personal Efficacy / PA

26. I have a strong grasp of the theory of reading development.

SD	D	NS	A	SA

27. I am confident in my ability to teach reading to every child in my class.

SD	D	NS	A	SA

28. In the word “musical”, there is the following number of phonemes:

5	6	7	8	9

29. In the word “excitable”, there is the following number of phonemes:

5	6	7	8	9

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Yorke and Mid North Literacy Project

Participant Survey

Dear participants

Thank you for your participation in the YMN Literacy Project in 2012.

I invite you to complete the following short questionnaire about your experience of the project this year, as it will assist future projects in South Australia and elsewhere.

As this is an anonymous questionnaire, please do not write your name, or any other comments on the questionnaire that will identify you or your school.

Thank you for your time and consideration in reflecting on your experience in this project.

Yours sincerely

Deslea Konza

Associate Professor of Language and Literacy

Director Fogarty Learning Centre

Edith Cowan University

School of Education
Fogarty Learning Centre

Post Project Survey

Instructions

Please complete the questions by ticking the appropriate box or inserting short answers (e.g. dot points) for open-ended questions.

Background

1. Your role [more than one response may be appropriate for this item]
   a. Teacher ❑
   b. Coordinator (e.g. literacy leader, curriculum co-ordinator) ❑
   c. School executive member (e.g. A/Principal, D/Principal ❑
   d. Aboriginal Education Teacher ❑
   e. School Support Officer ❑
   f. Consultant ❑

2. Current area of responsibility [more than one response may be appropriate]
   a. Junior primary (R-2) ❑
   b. Middle primary ❑
   c. Upper Primary ❑
   d. School Leader ❑
   e. Consultancy ❑

3. Years of teaching/school experience
   a. Up to 3 years ❑
   b. 4 to 7 years ❑
   c. 8 to 15 years ❑
   d. More than 15 years ❑

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AUSTRALIA ECU EDITH COWAN UNIVERSITY

Project Components

The following components of the YMN Literacy project have been useful:	1 Not at all	2 To a slight extent	3 To a moderate extent	4 To a great extent
1. Input on the Big Six	❑	❑	❑	❑
2. Input on oral language	❑	❑	❑	❑
3. Input on synthetic phonics teaching	❑	❑	❑	❑
4. Class visits	❑	❑	❑	❑
5. Networking with other teachers	❑	❑	❑	❑
6. Resources (decodable texts, magnetic letters, Time Timer clock)	❑	❑	❑	❑
7. What was the most helpful component of the Professional learning?				
8. How could the professional learning component be improved?				

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Knowledge of Literacy Learning and Teaching

As a result of my participation in the YMN project, I have:	1 Not at all	2 To a slight extent	3 To a moderate extent	4 To a great extent
1. Learnt more about how children learn to read.	❑	❑	❑	❑
2. Understood more about the importance of oral language to the development of reading.	❑	❑	❑	❑
3. Changed the order in which I teach letter/sounds.	❑	❑	❑	❑
4. Increased the pace of teaching letter/sounds.	❑	❑	❑	❑
5. Changed reading assessment practices.	❑	❑	❑	❑
6. Used more explicit strategies when teaching reading.	❑	❑	❑	❑
7. Introduced decodable readers to help children practise blending.	❑	❑	❑	❑
8. What, if anything, has been the most significant change in your teaching as a result of the YMN Literacy project?				

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Resources

The following resources have been useful in my understanding, assessment and/or teaching of reading:	1 Not at all	2 To a slight extent	3 To a moderate extent	4 To a great extent	N/A
1. Letters and Sound CD	❑	❑	❑	❑	❑
2. The instructional cycle for teaching synthetic phonics	❑	❑	❑	❑	❑
3. Magnetic Letters	❑	❑	❑	❑	❑
4. Time Timer clock	❑	❑	❑	❑	❑
5. Decodable readers	❑	❑	❑	❑	❑
6. Oral language assessment	❑	❑	❑	❑	❑
7. SPA	❑	❑	❑	❑	❑
8. Alphacheck	❑	❑	❑	❑	❑

Any other comments?

APPENDIX H

Reading levels as indicators of success

There was some discussion among members of both the ECU and YMN teams about collecting reading levels as an indicator of student progress. Examination of levelled readers in different schools, and discussions with participants revealed considerable inconsistency in their use. Some schools used the widely accepted PM Benchmark books for assessment, while others used a variety of levelled readers. Many teachers were not able to say how the readers in their school had been levelled or by whom. Some teachers were guided by publishers' levelling systems, which are not uniform. In one school, text levelling was the responsibility of the librarian. In other schools, it was done by class teachers and SSOs, based on comparison with other readers that had already been levelled, but when and by whom the original books had been levelled was usually unknown. A participant in the project who had been trained in Reading Recovery (RR) commented that the levelling system originated with the RR program, and only RR-trained tutors had the expertise to level books accurately. Inspection of readers at different levels confirmed considerable inconsistency in levels of difficulty, with some Level 5 books having many more non-decodable and unusual words than some Level 10 books.

There was also great inconsistency in how student assessments were conducted in order to establish the level at which they were operating. Some teachers provided a rich orientation to the book before the assessment took place, talking about the content, and providing some vocabulary.[1] Other teachers provided only a brief orientation, ensuring that the child could read the names of the main character(s) if they were unusual. A couple of teachers provided no orientation at all for students above Year 1, thus students were assessed on an unseen text. These different approaches would have had an impact on the final level assigned to each student.

Teachers also operated according to different guidelines when determining when students should progress to the next reading level. Some based their decision only on accuracy: if a student could decode the words at 97% accuracy or above, they were moved to the next level. Other teachers demanded a certain level of accuracy, but also asked several comprehension questions, including at least one that required the student to think beyond the text; that is, to draw on prior knowledge or use inferential skills. This explains the concern expressed by some teachers and consultants that students should not move beyond a certain level until a certain year level. This is justifiable if only accuracy is being measured.

If the processes within a school are consistent, the data obtained are useful at the school level, but student progress based on reading levels cannot be fairly compared across different schools unless there is uniformity in levelling procedures, and consistency in the guidelines used for student assessment. For these reasons, reading levels were not used to determine student progress in this project.

[2] For example, in one assessment session observed by the researcher using a book about Australian animals, the words *marsupial, monotreme, platypus, echidna* and several others were pointed out and discussed.

APPENDIX I

Statistical summary of students' results according to teacher engagement

Reception students

Reception Highly Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	34.62	58.20	32.59	37.47	7.26	85	<.0001*	.67
Letter Sounds	48.69	84.87	31.88	19.89	12.01	85	<.0001*	1.36
Blending	19.19	71.34	33.04	32.83	13.62	85	<.0001*	1.58
Long Vowel	1.74	28.26	7.62	37.36	6.7	85	<.0001*	0.98

Rec. Mod Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	19.26	42.42	27.69	35.21	5.50	37	<0.0001*	0.73
Letter Sounds	21.63	75.29	29.81	20.16	11.51	37	<0.0001*	2.11
Blending	10.26	54.74	25.20	40.85	7.14	37	<0.0001*	1.31
Long Vowel	0.26	7.24	1.62	21.55	2.05	37	0.0472*	0.46

Rec. Less Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	32.63	69.75	34.25	35.00	5.37	39	<0.0001*	1.07
Letter Sounds	29.10	79.93	28.11	23.88	12.49	39	<0.0001*	1.95
Blending	4.13	64.75	16.05	37.79	9.63	39	<0.0001*	2.09
Long Vowel	2.25	15.25	14.23	31.28	2.32	39	0.0254*	0.53

APPENDIX I

Statistical summary of students' results according to teacher engagement

Year 1 students

Year 1 Highly Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	58.65	74.88	33.31	36.35	3.66	50	0.0006*	0.47
Letter Sounds	71.16	83.35	24.76	27.38	3.04	50	<0.0038*	0.47
Blending	54.80	77.94	38.46	31.92	4.73	50	<0.0001*	0.65
Long Vowel	14.41	46.96	29.01	41.24	6.53	50	<0.0001*	0.91

Year 1 Mod Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	68.22	79.82	36.29	33.31	2.46	44	0.0179*	0.33
Letter Sounds	75.40	86.33	20.19	25.71	3.16	44	0.0029*	0.47
Blending	52.89	79.33	35.12	30.59	5.63	44	<0.0001*	0.80
Long Vowel	18.67	48.22	30.96	40.85	5.38	44	<0.0001*	0.82

Year 1 Less Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	50.09	49.70	36.37	40.91	0.06	22	0.9501	0.01
Letter Sounds	60.17	79.78	28.90	28.90	2.34	22	0.0285*	0.69
Blending	21.30	47.39	32.73	32.85	4.84	22	<0.0001*	0.80
Long Vowel	4.35	13.04	17.86	29.80	1.20	22	0.0585	0.35

APPENDIX I

Statistical summary of students' results according to teacher engagement

Year 2 students

Year 2 High Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	75.39	85.44	34.96	29.36	2.40	17	0.0282*	0.31
Letter Sounds	90.94	96.11	9.09	6.23	3.59	17	0.0022*	0.66
Blending	76.67	92.78	32.63	16.02	3.42	17	0.0032*	0.63
Long Vowel	54.44	77.78	39.37	33.88	4.88	17	0.0001*	0.64

Year 2 Mod Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	66.29	82.18	28.85	24.57	1.20	16	0.0628	0.59
Letter Sounds	76.06	86.71	18.05	23.38	1.20	16	0.0637	0.51
Blending	41.76	78.24	33.86	27.50	5.42	16	<0.0001*	1.18
Long Vowel	11.76	35.59	26.10	35.08	3.87	16	<0.0014*	0.77

Year 2 Less Engaged	Pre mean	Post mean	Pre SD	Post SD	t	df	*p*	Cohen's *d*
Letter Names	95.67	84	6.78	31.75	1.02	8	0.3377	- 0.51
Letter Sounds	94	82.67	7.40	31.20	1.01	8	0.3442	- 0.50
Blending	48.89	63.89	35.42	29.13	1.14	8	0.2861	0.46
Long Vowel	23.33	36.67	37.17	36.31	2.16	8	0.0630	0.36

Participant suggestions for improvement to project

In the Project Evaluation Survey, the participants had the opportunity to suggest ways in which the program could be improved, and how learning from 2012 could be extended in future years.

Participants were asked to suggest ways in which the program could be improved. Responses can be broadly grouped into three categories: opportunities for networking; resourcing; and professional learning content.

Opportunities for networking

Five of the 23 teachers requested additional opportunities for networking by facilitating visits to other sites 'to see how they manage/implement their literacy block'.

Broader collaboration was also suggested by mixing up the groups during discussion times throughout the PL days.

> Getting to know other participants better and develop strong collegial connections so that after involvement in the Literacy Project a strong network can be a support post-project.
>
> More time to network and share ideas with other teachers. Can never had enough ideas!

Another suggested a 'new group of teachers next year to spread the knowledge' would support further collaboration.

Resources

There were eight comments that related to resourcing or funding issues. Two participants commented that they would have liked more teachers from their schools to be involved in the project, so more teachers and SSOs were 'on board' with the project principles. Three comments referred to the need for additional resources such as sets of magnetic letters. The Time Timer clock, one of which was included for each school, was also a popular resource to help manage small group work and group rotations. The budget allowed for only one clock per school, which was frustrating in schools where two or more teachers attended.

Two participants felt that additional visits by the researcher would have been beneficial, and another would have liked additional release days for the individual student assessments to be conducted. These suggestions again related to funding of the project.

Professional learning content

One respondent expressed the desire for the explicit teaching cycle to be introduced on the first PL day, rather than the third:

> I wish we had the explicit lesson plan at the first workshop, so my presentation could have been better earlier on.

A further participant believed that additional time spent discussing feedback from the group as they implemented the strategies would be helpful; another wanted more time spent on how the

strategies could be implemented with older students, with students who were struggling, or with more advanced material; and two wanted more direction for working with Aboriginal students.

While several participants expressed views similar to ‘very happy with it all’, one expressed the desire for ‘shorter professional learning days’; and one other for ‘less talking, more doing’.

Suggestions included conducting the project with a new group of teachers in 2013 to consolidate practice within the region; providing opportunities to visit other classrooms; release time for testing; more time to network with other participants and to visit other classrooms.