Early Literacy Initiative Ready to Read Phonics Plus Project

End of Project Report
November 30, 2021

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Early Literacy Initiative
Ready to Read Phonics Plus Project

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Report Prepared for the Ministry of Education

CHILD WELL-BEING RESEARCH INSTITUTE
TE KĀHUI PĀ HARAKEKE
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Weka in the Shed

By Maggie Boston | Illustrated by Giselle Clarkson

Swim Day

By Maggie Boston | Illustrated by Stevie Mahardhika

Night Lights

By Samantha Montgomerie | Illustrated by Giselle Clarkson

A Colourful World

By Samantha Montgomerie | Illustrated by Stevie Mahardhika

Contents

Executive Summary

This report describes the development of a reading series that is based on contemporary research on how children learn to read. The reading series referred to as *Ready to Read Phonics Plus* provides 64 texts designed to support the implementation of a phonic scope and sequence as the basis for teaching children to learn to read. However, the texts aim to do more than develop children's ability to use phonic knowledge to decode words. As the name *Phonics Plus* suggests, the series enables children to also build the vocabulary and oral language skills necessary for ongoing success in oral language and reading comprehension.

The reading series was developed for the New Zealand educational learning context and utilises story themes and attractive illustrations that are of high interest and relevance to young school-aged children. In the development of these texts, we drew on the expertise of three authors (Samantha Montgomerie, Anna Kirschberg and Maggie Boston) and two New Zealand illustrators (Stevie Mahardhika and the award-winning Giselle Clarkson).

The series has four phases that align to the phonic scope and sequence. Each phase builds on skills and knowledge developed within the previous phase. The phases are based on research evidence on how to learn to read. The phases are also explained through the narrative of a learning journey in the same way that a tree grows and builds from a kākano/seed through to a rākau/tree.

Based on research evidence, the books contain decodable words with the addition of other carefully selected words that support meaning and enable implicit learning of grapheme-phoneme correspondences not yet taught. This supports the most efficient way of teaching children to learn to read and supports higher levels of children's motivation and engagement in early reading. The use of high interest and high-utility words is supplemented by the inclusion of a small group of common kupu Māori. This bilingual approach to teaching reading in a decodable reading series is unique. It means that Māori learners are able to see not just themselves in the illustrations, but their language in text.

The development of the series includes a number of features to support all children learning to read. We were able to draw upon the expertise and experience of Smartwork Creative to ensure a high quality presentation of illustrations and text layout to support and engage young learners. The clear distinction of text and illustrations, the large print with clear spacing

between letters themselves as well as words and lines, provide additional support for children who may be at risk for reading problems such as dyslexia.

The findings of an online survey completed by teachers and associated educationalists from 147 schools across New Zealand are reported. This survey was implemented prior to the printing and distribution of all texts, so teachers completed the survey after they had only seen 37 books across the four phases. These books had only been in the schools for approximately 3 months when most teachers completed the survey. Schools that completed the survey had teachers who received various types of PLD related to the use of phonic based readers.

The survey participants' feedback was overwhelmingly positive about the way the books looked, the illustrations, and the use of the same characters across books so that children became familiar with the names and characters in the series. Teachers reported children found the books engaging and were motivated to read the stories. Teachers were also very positive about the teaching notes at the back of each book.

In the survey, many teachers spoke of the importance of having supportive PLD that aligned with the scope and sequence. The survey findings illustrate that the more positive responses came from respondents who had participated in the Better Start Literacy Approach (BSLA) PLD, which aligns with the reading series and the body of research underpinning it. Those whose PLD aligned with other sequences of learning from other series of decodable texts were less supportive of this new series.

At the time of the survey, some teachers were unaware of the online teacher support materials for the reading series and had therefore not engaged with these resources. Those who did find the resources online found them valuable to support their use of the series.

The development of the Ready to Read Phonics Plus series was a unique opportunity to create a national reading series that draws on the most cutting edge research on how children learn to read. It draws on the foundational skills of phoneme awareness and letter-sound knowledge to contribute to explicit decoding strategies. However, it also provides opportunities for children to build their implicit learning of grapheme-phoneme correspondences and to extend their vocabulary and narrative skill development to support all children's development of critical foundational skills for reading accuracy and reading comprehension success.

Introduction

A well-established model of skilled reading comprehension, the simple view of reading (Gough & Tunmer, 1986) highlights the importance of building children's foundational skills to support word recognition and oral language comprehension. Children's phonic and phoneme awareness skills are critical to efficiency in word recognition (Gillon, 2018) and should be taught explicitly and systematically (McMurray, 2020). Children's vocabulary, oral narrative, and listening comprehension skills are vital to oral language comprehension. Taken together, word recognition and oral language comprehension skills can account for the majority of the variance in children's reading performance (Hoover & Tunmer, 2018).

Early reading instructional practices typically include a focus on developing children's underlying phoneme awareness, phonic knowledge, vocabulary, and listening comprehension skills, but there is risk that these skills develop in isolation. The ability to transfer these foundational language skills to the reading and writing process needs to be explicitly taught, particularly for children who may be at higher risk for persistent reading challenges like dyslexia.

Children's early reading texts (referred to as children's readers) are used to help support young children to read connected text. The type of words used in these readers varies from natural language to controlled word structure. Decodable texts typically use a large proportion of phonetically regular words that are controlled within texts. Words are carefully selected to align to a specified phonic scope and sequence. Children receive explicit instruction in the grapheme-phoneme correspondences that then appear in the text they read (Mesmer, 2009), which helps them to transfer their emerging phonic and phoneme awareness knowledge to the connected text reading process.

However, as English has an opaque orthography, some graphemes can have multiple pronunciations while some phonemes can have multiple spellings. This is known as 'set for variability' and applies to all words, whether phonetically regular or irregular (Elbro & de Jong, 2017). Exposure to variability contributes to automaticity in word reading, but some children's readers use text that tightly controls how children are exposed to this variability.

There is near unanimous agreement that teaching children to read using decodable texts supports effective word reading using a phonic based strategy (Castles et al., 2018; Cheatham & Allor, 2012; Mesmer, 2009). Researchers who examined effects of phonics instruction on text (decodable versus non-decodable) have reported better performance and long-term retention for phonics reading with decodable text (Chu & Chen, 2014). Findings from a meta-analysis on the efficacy of text decoding reveal its potential benefits on early reading accuracy (Cheatham & Allor, 2012), but there is no difference in the efficacy of texts with high or moderate levels of decodable words.

This project developed a series of 64 texts suitable for young readers with accompanying teacher notes and teacher support material. Robust research findings on how to best support children learn to use both word recognition and oral language comprehension in the reading process informed the development of the readers. The project developed the series specifically for our New Zealand educational context using simple complete stories that hold relevance for our young tamariki in New Zealand. The story themes we chose were based on teacher feedback from early research studies (Gillon et al., 2019) and included a common set of characters across the series. They were designed to be attractive texts that hold relevance for young learners to support their interest and motivation in learning to read.

The purpose of this report is to:

1. Describe the narrative for series development.

2. Summarise the research informing the series and teacher support materials.

3. Describe the findings from a survey of teachers from randomly selected schools from across New Zealand, related to their perception and acceptability of the first 37 books in the series.

Development Process of Phonics Plus levels

An early step in the development of the Phonics Plus series of 64 readers was to establish how the increasing complexity of the readers would be conceptualised. The Phonics Plus enhancement to the Ready to Read series presented an opportunity to consider a different way for children's readers to be described. The Phonics Plus series uses a systematic introduction of phonemes and graphemes, aligned with developmental speech patterns and phonological awareness development. Texts are separated into phases, relating to the complexity of introduced patterns, phonological awareness skills required for successful word decoding and aligned teaching targets. Each phase has a sequenced range of books to draw from.

What is the narrative for the series development?

We wanted to capture the systematic development of reading skill within this new series in a narrative that would be meaningful to kaiako, ākonga and whānau. In collaboration with the Ministry of Education, a concept of growing reading ability from *he kākano*, a seed, to *he rākau*, a tree emerged. As part of this emerging concept, Tūraukawa Bartlett developed the narrative below, which provides a richer kōrero to the journey. Our team added to this narrative, by describing the skills acquired by readers at each phase.

> **Poipoia te kākano kia puāwai** – *Nurture the seed and it will blossom*
>
> Every tamaiti is a taonga; as is their learning journey supported by their whānau and kaiako. Just like a seed being sown, every tamaiti holds unlimited potential and the ability to one day stand strong and independently while taking pride as they blossom through each phase of their never-ending learning journey through life.
>
> **"Mā te manaakitanga a te whānau e puāwai ai te pitomata o te tangata"**
>
> *With the aroha and support of the collective, the potential of the individual will be realised*

Narrative visual representation

Once the narrative was agreed on, Smartwork Creative, the Ministry of Education and the team from UC worked together on a logo. The brief of the logo was to capture these new phases, while not neglecting the important history of the Ready to Read Colour Wheel. The final logo developed by Smartwork Creative perfectly captures the journey from *he kākano* to *he rākau*, with the leaves of the tree representing the colours of the existing Colour Wheel. The mixture of colours of the leaves represent the variety of reading texts that children will be able to access once they have completed their journey through the Phonics Plus reading series.

The four phases within the narrative supporting children's reading journey:

Phase 1: Whakatō Kākano – Planting the seed

The first stage represents the sowing of a seed in a new learning environment surrounded by the collective support of the whānau and kaiako. This phase also recognises that every young person's journey is unique to them and their whānau, and where that journey begins may be different.

There is an emphasis of beginning the new journey as a collective, working together in partnership with the tamaiti to discover and unleash their potential to one day lead their own learning journey.

In the Ready to Read Phonics Plus series the emphasis in the Kākano readers is on supporting tamariki to build strong foundational skills for subsequent reading success. This includes supporting tamariki to use their emerging phoneme awareness and letter knowledge to decode common phonetically regular words, to comprehend simple stories, and to develop their oral language skills around the story theme.

Phase 2: Kua Tupu – The seedling appears

The second phase represents the first sign of independent growth in the learning journey. The tamaiti is starting to realise their potential and ability to face and overcome challenges in order to learn and master new concepts. There is continued collective support from the whānau and kaiako, however this phase signals the time to start allowing the tamaiti more freedom to embrace new learnings independently.

In the Ready to Read Phonics Plus series the emphasis in the Tupu readers is on supporting tamariki to use their advancing phoneme awareness and letter knowledge to decode phonetically regular but more complex words, learn high-utility words, and to advance their oral language skills around the story theme.

Phase 3: Te Piko o te Māhuri – The sapling forms

The third phase represents the continued growth of the tamaiti and the beginning phases of starting to independently navigate new complex challenges by reflecting on previous learning and strategies to overcome them. The growing sense of independence of the tamaiti is starting to become their greatest skill, and external supports are starting to become less needed and called upon.

In the Ready to Read Phonics Plus series the emphasis in the Māhuri readers is on supporting tamariki to integrate phoneme awareness and letter knowledge skills with other cues to decode unknown words with more complex vowels, build reading fluency and comprehension, and to advance their oral language skills around the story theme.

Phase 4: Te Puāwaitanga o te Rākau – The blossoming tree

This final stage represents the fruition of the tamaiti in becoming a confident, proud and independent reader with the confidence to embrace and overcome new challenges independently. Just like a blossoming tree, the tamaiti now stands full of pride with a sense of fulfilled potential and a role model for others in their learning journey.

In the Ready to Read Phonics Plus series the emphasis in the Rākau readers is on supporting tamariki to integrate their phonological, orthographic and morphological knowledge with other cues to efficiently decode more complex words, advance reading fluency and comprehension and extend their oral language skills around the story theme.

Research Evidence for Text Level Decisions

In developing the readers within the four phases of the Ready to Read Phonics Plus series a number of text level decisions were made based on the research evidence. The following sections provide a research rationale as to aspects that informed the Ready to Read Phonics Plus series.

Amount of decodable text

- *Why aren't all the words purely decodable?*

  There has been a long-standing debate on the necessity of using well-matched "highly decodable" text in early reading instruction. Although the importance of providing children with regular practice in skills that support efficient word decoding ability is strongly supported by the research evidence (Castles et al., 2018) the optimal level of decodable text (phonetically regular text) in readers is debated.

  Some researchers argue that using a tightly controlled vocabulary with regular letter-sound correspondence makes reading easier even for struggling readers (Beverly et al., 2009; Mesmer, 2000). In contrast, other researchers argue that vocabulary simplification in decodable texts is unnecessary and can make reading more difficult for struggling readers since some easily decodable words may be low-frequency words in English (Solity, 2020). Overuse of decodable, but low frequency words, may potentially impede comprehension and fluency (Cheatham & Allor, 2012).

  In addition, researchers argue that over-reliance on decoding phonetically regular words when reading decodable texts limits the implicit learning of more complex letter-sound relationships (Perfetti & Stafura, 2014) and may prohibit typical literacy development (McMurray, 2020). Accordingly, in the Ready to Read Phonics Plus texts, most of the words used are decodable at that point of the scope and sequence, but high-frequency, high-utility words with additional orthographic patterns are also used.

- *What percentage of the text should use target phoneme-grapheme patterns with phonetically regular word patterns?*

  Recent research suggests that within a context of phonics-based instruction and use of decodable texts for early reading instruction, the proportion of targeted phonetically regular words (e.g., moderate versus high proportion), relative to high-frequency or irregular word patterns has no significant impact on continuing reading achievement (Boggio et al., 2021; Price-Mohr & Price, 2020).

  A strict adherence to word selection according to a prescribed set of phonemes and graphemes that have been previously taught to children obviously limits story themes and story structure. This can lead to less interesting or motivating texts for the children to read and may limit learning through the use of very simple language and syntactic structures (Castles et al., 2018). These texts can also be taxing for reading comprehension as there is no predictable story structure. Price-Mohr and Price (2020), for example, provide an example of decodable text that is highly constrained in its use of phonic patterns, but challenging to understand.

  In the Ready to Read Phonics Plus series, the percentage of decodable words from the total words in texts varies from 41% to 90%, depending on factors such as the number of times irregular words like "the" or "a" appear in the texts. In general, the majority of the words used in each text are *decodable regular words* with the texts having a moderate use of constrained phonetically regular vocabulary, which aligns with the research evidence of effectiveness. The challenge of attempting to read text that is slightly beyond the independent level of readers can also contribute to the use of vocabulary to support decoding and thus contribute to comprehension (Connelly et al., 2001).

  As part of the development of the books, authors were given a writing guide, which indicated that these readers should have at least two words containing the target grapheme-phoneme correspondences per sentence along with one or two high-frequency words. Later in the series there are up to two words per page that contain the new target grapheme-phoneme.

Children's readers that show little or no attention to the systematic introduction to phoneme-grapheme patterns in phonetically regular words, provide limited practice for children learning to decode text. For example, in the Ready to Read Magenta level 2 book "Make It" by Beth Becker, page 8 has the line *We made a big blue birthday cake*. This sentence has words with five different long vowel spellings, including two for the long a vowel sound (a_e and ay).

The top of the
pot pops off!

Sample page from *Pop Pop in the Pot* (Kākano)
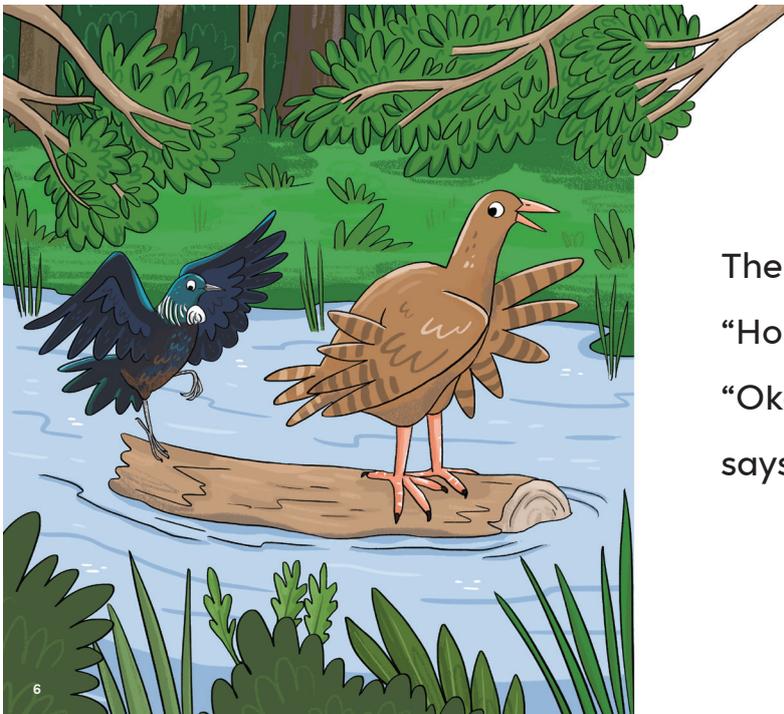
The log floats by Tūī.

"Hop on my boat," says Weka.

"Okay, just keep afloat!"

says Tūī.

Sample page from *Weka's Boat* (Māhuri)

Reading text that does not target word decoding practice may encourage children to rely solely on a visual word recognition strategy which is contrary to our theoretical understanding of skilled reading and contrary to scientific evidence for effective methods to teach reading (Ehri, 2005). This may be particularly evident if the illustration is directly aligned to the text. Young readers may memorise texts to mimic reading but this strategy does not advance children's critical underlying skills in word decoding. Text memorisation strategies also potentially mask underlying weakness in children's phonological processing skills that may later present as reading problems like dyslexia.

Nat's top has big cuffs.

She puts on the hat with a bell.

Ding! Ding! Nat's hat rings.
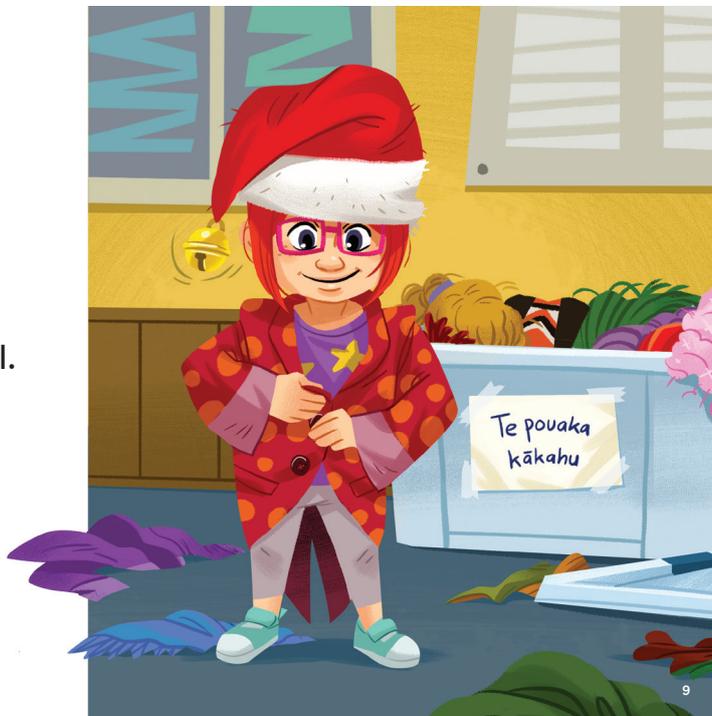
Sample page from *Dress-up Hullabaloo* (Tupu)

The sea rolls back.

"Kia tere!" Red Rock

says to himself.

Red Rock wiggles out

of the rocks. He jiggles

out onto the sand.

Sample page from *Tumble and Turn* (Rākau)

Ready to Read Phonics Plus Book Sequence

Title	Focus sounds
Kākano	
Tap Tap	m d p t n s a o e
Mud Mud Mud	m d t n s a o e u
Pop Pop in the Pot	m d p t s a o e
To the Top	m p t s a o u
In the Bin	t n c b a i
Tomtit	m p t n s c a o
Tag	m p t n g a o i
Tāne and the Bug	c l n b g i u
Nan in a Net	c l n b s i u
Rat on the Rug	s f g r
Get to the Vet	v j l
Bug in a Hut	n t b g h i u
A Wet Ant	t n s w h a u
Weka gets Wet	w h k
Weka in the Shed	sh ck
Chit Chat	ch ng
Huhu in the Mud	th j
Zip and Zag	Y z
Wet Kai	Revision
Hoot Hoot	wh oo
Tupu	
Swim Day	ee blends with s
A Batch of Pancakes	x -tch
Weka in a Flap	Blends with l
Frog in a Log	Blends with r
Home Time	oo, ee, blends,
Which Way to Go	Blends
Weka Helps Out	End blends
Where is Kiwi?	End blends
Red Rock	Blends (CCVC / CVCC)
At the Marae	Blends (CCVC / CVCC)
A Fun Quiz	qu
The Long Swim	Revision
Dress-up Hullabaloo	ff ss ll

Title	Focus sounds
Time to Hide	i-e
Splash	a-e, oo (as in look)
Be Brave	a-e, soft c
Vote for Fin	o-e
Ride to the Top	i-e
The Tall Cone	-all
Missing Tinā Matua	Revision
Māhuri	
Sports Day	-ing
Dipped in Mud	-ed
Rain is a Pain	ai
Splashing in the Stream	ea
Flax on the Farm	ar
The Best Place to Rest	Revision
The Fastest Toy	oy
Letter to Samoa	-er as schwa
Slow to Grow	-ow
Nat's First Game	-ir
Hide and Seek	-ou
Weka's Boat	-oa
Stay	-ay
Lurking in the Dark	-ur
Photo Time	-ea as short, ph
Huhu's Play Date	Revision
The Night Lights	-igh
Tinā Matua Visits	-air, -ear, -ere
Rākau	
Tumble and Turn	Consonant –le syllables
A Midnight Roam	Prefixes un- mid-
On the Forest Floor	Consonant doubling with suffixes
Tinā Matua at Kura	Multi-syllable words
A Colourful World	Suffixes
We Belong	Inflectional suffixes

The alphabetic principle and use of a phonic scope and sequence

■ *What teaching pace should we consider for introducing the alphabetic principle and what scope and sequence should we use to guide this teaching?*

The alphabetic principle refers to the understanding that spoken words are made up of sounds (phonemes) and that these are represented in print by letters (graphemes). Learners require this understanding to apply the alphabetic code to reading and spelling. It is necessary to hear sounds in words and attach a grapheme to that sound, and vice versa.

At school entry, children may demonstrate wide variability in their phonic and phoneme awareness knowledge depending on their early childhood language experiences and other influencing factors. When their class instruction includes explicit instruction in phonic and phoneme awareness and the use of decodable texts to practice using these skills to decode words, this variability can be quickly reduced and the majority of children can rapidly advance their knowledge of the alphabetic principle and early reading skills (Connor et al, 2013; Gillon et al. 2019; Juel & Minden-Cupp, 2000).

However, the number of grapheme-phoneme patterns that should be taught at once and at what pace they are taught are important considerations. In some early reading programmes one letter is introduced per week and children only move to reading connected text when a certain level of phoneme-grapheme proficiency is achieved. This approach has been criticised as it utilizes an inefficient use of time and creates unnecessary delays in acquiring letter knowledge (Jones & Reutzel, 2012; Dougherty Stahl., 2014). Teaching letter-sound knowledge at a slower pace delays children's ability to discriminate between similar letters and also limits decoding practice opportunities (Roberts et al., 2020). On the contrary, faster pace letter instruction with frequent repetition and practice is generally recommended to facilitate reading, spelling, and writing. Researchers found that a faster pace of explicit instruction in letter sound knowledge benefits all learners (Sunde et al., 2019).

The development of the Phonics Plus series aligned with this latter research and introduced groups of letters early to allow children to benefit from a faster pace of letter instruction and to allow for greater vocabulary choice in the story text. The choice of these letters was informed by the selected scope and sequence for the series. Lessons were differentiated for children's individual needs to ensure children requiring more time to acquire phoneme-grapheme correspondences were not disadvantaged.

How does the Ready to Read Phonics Plus scope and sequence work?

A phonic scope and sequence can provide teachers with a useful framework in which to introduce grapheme-phoneme correspondences to learners. The selected scope and sequence for the Phonics Plus series was adapted from one used previously within an MOE funded project, the Early Literacy Project (Chapman et al., 2018). Adaptations to the original scope and sequence were based on work within the BSLA pilot trials (Gillon et al. 2019). In particular, it took into account earlier developing speech sounds (e.g., m p t d n b), introducing them earlier in the sequence for the first phase.

The provision of a scope and sequence does not mean that all children will learn the specified correspondences in that order; learning of the alphabet and letter-sounds is not linear (Justice et al., 2006) and there is no research evidence to suggest one scope and sequence is more effective than another. However, a scope and sequence does provide a guide for instructional practice and helps teachers meet individual learner needs.

Several key features of research on learning are implemented in the scope and sequence selected. The first is explicit instruction; it is expected that learners are explicitly taught by their teachers what the grapheme's corresponding sound is (Chapman et al., 2018; Connor et al., 2014; Denton et al., 2014). This is fundamental to the use of decodable texts (Foorman et al., 2016) and reflected in the teacher support materials for each book.

The second is the progression from small to large units; research suggests that learning broken down into its smallest element is most effective, and there is specific research on this for reading (Savage et al., 2018). In the case of the Phonics Plus texts, this means specific grapheme-phoneme correspondences are targeted in each book. Many other reading series and reading programmes have a scope and sequence, and although the sequence may differ, the scope of each phase is similar. There is no simple sequence of learning of the smallest parts that is consistent.

The third is that it systematically builds on prior knowledge, so although learning is not linear for most learners, when it is systematic and structured all children are supported (de Graaff et al., 2009; Johnston et al., 2012). In the Phonics Plus series, the overall series is systematically aligned to the scope and sequence and the books build on previously introduced words and phoneme-grapheme patterns.

Finally, it also allows learning to be at the pace of the learner; it is not paced so that all correspondences must be learned in a certain time, some children learn faster and some learn more slowly. Although not systematically built into the book series, the sequential and systematic teaching of the scope and sequence means that children can move as slowly or as fast through the sequence as needed. Books can be returned to for reinforcement, and books can be read at the pace deemed necessary for any individual learner.
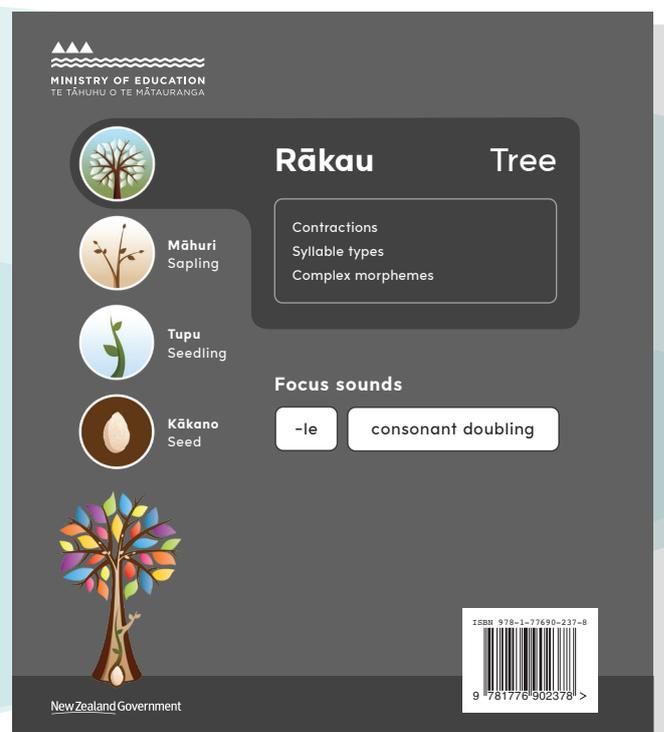
Sample back covers showing the Phase scope and focus sounds for the book.

Rat on the Rug

Nat and Tāne are having a picnic at Nat's house. What is that under the rug?

Kākano Seed

Focus sounds	**Consonants**: Ss Ff Gg Rr **Previously introduced**: a n d i t u b p c	Decodable words	**sit**, in, **sun**, on, big, **rug**, tips, dips, **fun, get**, up, **fat, rat,** cat, **run,** and
High utility non-decodable words	**Teach as high utility non-decodable**: they **Previously introduced**: Tāne, the, a, is, sees	Resources	**Rat on the Rug** book Letter manipulatives of all letter-sounds listed / mini whiteboards, whiteboard markers **Audio recording** of all focus sounds and te reo kupu in the book

This lesson sequence can be completed in one or more sessions. New words are practised as they are introduced in the book.

BEFORE READING

Explicit instruction on focus sounds

Introduce each letter and sound using magnetic letters, other letter manipulatives or a whiteboard. Ask the children to repeat the name and sound of each letter after you. Say, "*This is the letter S. It makes the sound of /s/. What is the name and what is the sound?*" Make sure you don't add vowel sounds at the end of consonant sounds. Complete all of the focus consonants.

Making and breaking words with sounds

Making and breaking words using sounds draws the children's attention to letter-sounds in print words. Choose up to four words from the book that include the focus sounds (for example, **sit, fun, rat, big**). Give the children letters, or mini whiteboards and whiteboard markers, and let them know that they are going to make some words to read. Give them the first sound, then ask them to put the letter in front of them (for example, **s**), and make the sound. Continue through the rest of the letters in the word (for example, **sit**) and practise sounding out and blending the sounds together.

Remind the children this is the way to read new words in the story. Complete all of your selected words, and use any sounds the children have already learnt.

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Weka Gets Wet

It's a hot day down by the awa and we meet Weka looking to get out of the sun. Tuna helps Weka cool down, but Weka is not impressed.

Kākano Seed

Focus sounds	**Consonants**: Ww Hh Kk **Previously introduced**: a e i o u n p s g t d m	Decodable words	naps, in, sun, gets, **hot, hops, hat, kit, wags,** at, **nods**, tips, dips, **wet,** mad, and
High utility non-decodable words	**Teach as high utility non-decodable**: Weka, waka, Tuna **Previously introduced**: the, a, he, sees, is, go	Resources	**Weka Gets Wet** book Letter manipulatives of all letter-sounds listed / mini whiteboards, whiteboard markers **Audio recording** of all focus sounds and te reo kupu in the book

This lesson sequence can be completed in one or more sessions. New words are practised as they are introduced in the book.

BEFORE READING

Explicit instruction on focus sounds

Introduce each letter and sound using magnetic letters, other letter manipulatives or a whiteboard. Ask the children to repeat the name and sound of each letter after you. Say, "*This is the letter W. It makes the sound of /w/. What is the name and what is the sound?*" Make sure you don't add vowel sounds at the end of consonant sounds. Complete all of the focus consonant sounds. Revise sounds that the children have already learnt and also appear in this book.

Making and breaking words with sounds

Making and breaking words using sounds draws the children's attention to letter-sounds in print words. Choose up to four words from the book that include the focus sounds (for example, **hot, wet, kit, wags**). Give the children letters, or mini whiteboards and whiteboard markers, and let them know that they are going to make some words to read. Give them the first sound, then ask them to put the letter in front of them (for example, **h**), and make the sound. Continue through the rest of the letters in the word (for example, **hot**) and practise sounding out and blending the sounds together.

Remind the children this is the way to read new words in the story. Complete all of your selected words, and use any sounds the children have already learnt.

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Sample lesson plans available at *https://instructionalseries.tki.org.nz/Instructional-Series/Ready-to-Read-Phonics-Plus*

More than just decoding

■ *How will the texts support children's independent learning?*

The use of a scope and sequence to guide the development of the Ready to Read Phonics Plus series also supports cumulative learning through what is referred to as the "self-teaching hypothesis" for learning to read (Share, 1995). That is, those acquired skills in one reader support the learning in the next reader through children learning to generalise skills learnt to read new words. The self-teaching hypothesis asserts that when the child tries to read a new word, they draw attention to letter pattern (orthographic) and try to pair this up with the sound patterns (phonic). Instead of guessing, the child attempts to phonologically recode the novel word and acquire new orthographic knowledge using rudimentary phonological recoding skills (Loveall et al., 2013). This ability would consequently lead a child to become a skilful reader.

Notably, in the self-teaching hypothesis, it is orthographic learning (not orthographic knowledge) that underpins reading skills, as it reflects the ability to access existing orthographic representations, and the ability to apply it to other contexts (Mimeau et al., 2018; Ricketts et al., 2011; Share, 1995). Deacon et al. (2019) noted that research needs to be carried out on how these orthographic representations are stored; and whether individual differences exist in the ability to phonologically recode.

Another means of self-teaching can be contextual word identification that requires syntactic or semantic cues. Due to the ambiguity of contextual word identification, the proponents consider phonological recoding as key in orthographic learning (Pritchard et al., 2018). However, as learners begin to apply the implicitly learned patterns they will not always read words accurately. It is at this point that children begin to draw on their vocabulary to identify the correct pronunciation of the new word (Tunmer & Chapman, 2012; Steacey et al. 2019; Zipke, 2016).

Learning to decode regular words that contain previously taught, and new, grapheme-phoneme correspondences are one way that children can build a body of orthographic representations to apply to the independent learning. This works as a kickstart to the self-teaching mechanism (Arrow & Tunmer, 2012). However, the learning of high-frequency words at the same time as learning to decode also works to support the self-teaching mechanism (Share, 1995).

■ *Should children be able to decode words before learning high-frequency words?*

High-frequency words and a small number of lower-frequency vocabulary that are not phonetically regular provide the high-utility "other" words in the texts. These words provide the interest to texts through enabling a complete story theme, interesting vocabulary and narrative comprehension opportunities. This helps to mitigate the demotivating aspects of purely decodable text.

Learning how to read irregular, high-frequency words is another important feature of learning to read. Even when children attempt to decode words that are high-frequency they can be taught to identify how some features of that attempt, particularly consonants, at phonological recoding match with words they have in their oral vocabulary (Steacey et al., 2019; Savage et al., 2018). Having children practise sounding out irregular words, even when they don't know all the vowel patterns has a positive effect on children attempting to read unknown words (Murray et al., 2019). Savage et al., (2020) found that when children decode words incorrectly they are able to use their oral vocabulary to match the attempt at sounding out with a known word.

We followed these research findings to develop the lesson plans associated with the texts so that they explicitly direct children's attention to the regular aspects of grapheme-phoneme correspondences in high-utility words (e.g., initial phoneme may be regular and known by the child). This helps maximise orthographic learning opportunities of the grapheme-phoneme correspondences that are not explicitly taught, but when the word is provided to them. After multiple exposures, children can begin to use the connections implicitly.

Inclusion of kupu Māori

■ *Why is te reo Māori kupu introduced?*

> **"Create the conditions for te reo Māori to be seen, read, heard and spoken"**
> *Tau Mai Te Reo, The Māori Language in Education Strategy, April 2020*

The Phonics Plus series which is designed for English medium classrooms integrates a small selection of common kupu Māori (te reo Māori words) into the book text. A number of Ministry of Education strategies and research into language revitalisation inform this considered inclusion of kupu Māori.

Te Rautaki Reo Māori – The Māori Language Strategy views te reo Māori as a taonga and includes a focus on **strengthening language use** and **strengthening language skills** to support the achievement of the vision to have the Māori language spoken widely by Māori, and its value appreciated by all New Zealanders.

Further, the *Māori language in education strategy – Tau Mai te Reo* gives clear directions to education services about their roles in providing Māori Language in Education.

> **"We will require that education services are taking all reasonable steps to make instruction available in tikanga Māori and te reo Māori"**

"Yuck, wet kai," yells Sam.
"Get the net," says Nan.
"No kai for us and no kai for the fish!"
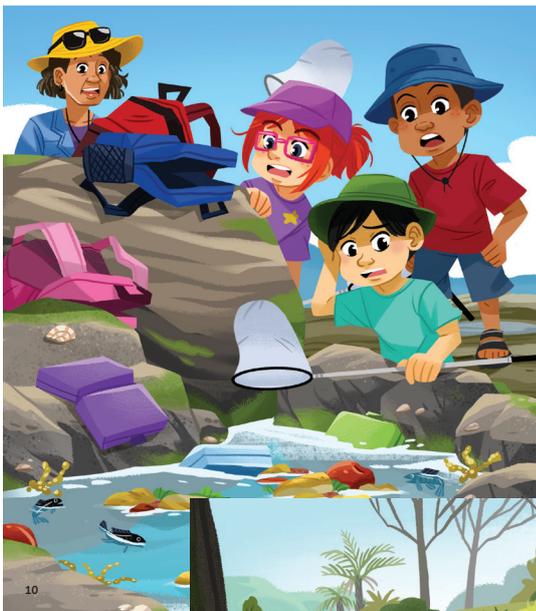
Sample page from *Wet Kai!* (Kākano)

"Time to bike to the top.
Let us ride at your side,"
says Tāne.
"Kia maia!" says Nat.

■ Sample page from *Ride to the Top* (Tupu)

The integration of kupu Māori from children's earliest school reading experiences supports both government policy and current thought on language revitalisation. As such, the Phonics Plus books are designed to reflect modern day Aotearoa New Zealand, which includes the use of some kupu Māori and Te Ao Māori ideas in the book text, illustrations and teaching notes. Teachers can teach these kupu Māori as high-frequency words, reflecting those commonly used in school contexts, for example 'ka pai' and 'kura'.

As the books are designed to teach children to decode written English, the decoding of kupu Māori is not the focus of these books. However, kaiako can draw attention to the decoding of these words if appropriate for their learners. Frequent use of these words in print will further enable children to internalise the pronunciation of the te reo Māori vowels to use in attempting more words through the self-teaching mechanism (Share, 1995). Audio files are provided online to support the correct pronunciation of kupu Māori for kaiako and whānau.

The natural inclusion of kupu Māori is hoped to provide a bridge between the act of learning to read in English and Māori language use in the community. It also provides a way to incorporate Māori students' funds of knowledge into the language of school reading materials (Moll et al., 1992; Toppel, 2015).

Supporting struggling readers

■ *How will the readers support children who may be at risk for persistent reading challenges like dyslexia?*

The factor that is most commonly associated with children who have reading problems like dyslexia is an underlying phonological processing difficulty (Tunmer & Greaney, 2010). Therefore, texts that provide practice in children developing their phoneme awareness and phonics knowledge and using this knowledge to support efficient and effective word decoding in the early stages of learning to read is the most evidenced-based approach to support children who may be at risk of reading difficulties. There are no specific features of texts that have been found to be better for those with dyslexia.

Furthermore, although there is a view that using a dyslexia font makes reading easier for those with dyslexia, no research has been able to find support for effectiveness of a particular type of font for dyslexia (Marinus et al., 2016; Kuster et al., 2018). Research has found that providing some spacing between letters in words, and across words and lines, makes reading easier for those with dyslexia (Duranovic et al., 2018; Galliussi, 2020) and we have incorporated these features into the texts. In addition, we separated the text and illustrations to ensure that children were able to focus on the text when reading.

Text and illustrations are separated to ensure that children are able to focus on the text when reading.

Spacing between letters in words, and across words and lines, makes reading easier for those with dyslexia.

"This is fun,"
says Tāne.
"This is a big mix,"
says Nat.

Supporting language and comprehension

■ *What about comprehension?*

To ensure children are supported to learn all skills that underpin reading comprehension, a combination of decoding practice, vocabulary building, and narrative structure are necessary elements of children's early readers.

In the Ready to Read Phonics Plus series, therefore, we directed authors to consider these wider aspects and asked illustrators to ensure the picture was not obviously aligned to the text but aided the text comprehension. Authors were specifically directed to consider the story theme and structure, interesting vocabulary choices, as well as the use of phonetically regular words. It is the inclusion of these additional elements to the use of decodable words that is reflected in the title of Phonics Plus for this series.

■ *How were the characters and stories selected?*

Pilot trials of the BSLA in Christchurch and Auckland Schools (Gillon et al. in review) included children's readers authored by the researchers that aligned with use of phoneme awareness, vocabulary, and oral narrative skill development and provided practice in phonological decoding of words. We trialled New Zealand story themes related to New Zealand native flora and fauna and New Zealand themes relevant to young New Zealand children. Through this process we gathered feedback from teachers related to story character lines and story themes as well as text level difficulty which informed the current Ready to Read Phonics Plus series.

Following teacher input from the pilot trials we developed story lines related to New Zealand animal characters (fantasy fiction) and New Zealand children (realistic fiction). The realistic fiction stories were relevant to children's lived experiences and included a range of topics suggested by teachers as well as our team. These were initially slotted into the scope and sequence to ensure that there were equal numbers of each genre, but as the different phases were developed they were adjusted slightly.

Review processes ensured we carefully considered a number of cultural, environmental, and equity issues. Our review processes included consulting with Lynne-Harata Te Aika as a cultural advisor, and seeking advice from WaterSafe New Zealand, DOC and the SPCA.

The illustrators

Stevie Mahardhika

Stevie was born in Jakarta, Indonesia. He came to New Zealand to study graphic design at AUT in Auckland. After graduation he began working as a freelancer, joining Watermark Creative, a group of illustrators and animators. His illustrations have been used in educational material, trade-books, and commercial work including packaging and advertising. Stevie has worked on many published books ranging from established to self-published clients in New Zealand, Australia, and the United States.

His main interests have always been children's book illustrations, especially ones with fun child-like animal characters. However, lately he's been enjoying drawing monsters and dinosaurs as well. Friendly ones of course!

When he's not busy drawing, or entertaining an active but delightful toddler, he likes to read a good book, enjoy a cuppa, and listen to some nice cool jazz.

Giselle Clarkson

Based in Wairarapa, Giselle Clarkson is an award-winning freelance illustrator whose work often focuses on New Zealand's native flora and fauna. She has a Bachelor of Fine Arts in photography from the University of Canterbury. As well as illustrating children's books, she writes non-fiction comics about science and conservation and is a regular contributor to The New Zealand School Journal. Her work includes The Secret World of Butterflies (written by Courtney Sina Meredith, 2018), a book produced in collaboration with the Auckland Museum, and illustrations for new editions of classic stories by author Joy Cowley.

Teacher Support Materials

We have developed three key components to support teachers in the use of the Ready to Read Phonics Plus series. These are:

1. **Teaching notes at the back of each reader.** We have provided evidence-based teaching notes at the back of each text to provide ideas for teachers and whānau. The notes include activities to help develop underlying phoneme awareness skills to enhance children's reading and spelling accuracy. The notes also provide activities to build oral language skills that support reading comprehension and extend their oral language development. The activities are based on years of research by developers of this series, as well as international research findings (see Gillon, 2018 for an overview).

2. **Online teacher support materials.** We have provided detailed text overviews for the series, online scope and sequence, and lesson plans for each text to help teachers who may require more support in using the texts. We have also provided audio files for each text and audio files to support the pronunciation of target phonemes and kupu Māori in each text. The lesson plans are structured, and support teachers who are new to providing explicit instruction, by providing a suggested script for the initial explicit instruction and 'during reading' guidance. The page by page break-down of support to give to children provides guidance on what to encourage children to sound out and blend on each page, or what to provide a prompt for.

   The structure of the lesson plans is based on research on the importance of providing explicit instruction. Explicit instruction relies on the more effective teacher telling and explaining what children are learning (Archer & Hughes, 2011), rather than relying on the less effective approach of children discovering the learning for themselves (Hattie, 2009). The support materials are based on the gradual release of responsibility model of Fisher and Frey (2006) and the Division of Labour for learning model of Byrne (2005). It is anticipated that a child will need teacher guidance from the explicit instruction to begin learning, and then the child can apply the learning more independently, by practising reading connected and decodable text.

3. **The BSLA.** This is a comprehensive Tier 1 and Tier 2 teaching approach that develops children's underlying skills in phonics, phoneme awareness, vocabulary, and oral narrative abilities that are necessary for successful connected text reading attempts. The BSLA embeds the Ready to Read Phonics Plus readers into the approach and teachers are provided with in-depth professional learning and development including coaching and mentoring via the BSLA microcredential qualification. The current contract to deliver this PLD to support teachers use of the Ready to Read Phonics Plus has funding available for 480 literacy specialists and 4,880 new entrant and Year 1 class teachers from 2020 until the end of 2023.

The data collected to date (BSLA October MOE report) suggests teachers within the BSLA are effectively using the Ready to Read text in ways that are rapidly supporting children's word decoding ability even after a 10 week period of implementation. This rate of progress is fast, and is further illustrated in the rate of progress in the foundational skills. BSLA has found that children who start off with less knowledge progress the fastest in phoneme skills and letter-sound knowledge.

All of the teacher support materials that accompany the Ready to Read Phonics Plus series reflect current research knowledge of effective teaching strategies to support children to read connected text. The text editors are all leading researchers in children's oral language and/or early reading development. This is a particularly unique feature of this series development as it is rare to have such a close connection between strong research expertise and development of children's early readers. In addition, the researchers are all New Zealanders with strong understanding of the cultural relevance of texts to our New Zealand context. This is very much a series developed by New Zealanders for New Zealand tamariki and teachers working in implementing the New Zealand education curriculum.

Teachers' Initial Perceptions of the Ready to Read Phonics Plus Series

In this section we describe the findings of a teacher survey aimed at gathering initial independent feedback on the first 37 texts within the series.

Survey method

■ *Participants*

An online survey was distributed to principals from a randomly selected sample of **802 schools**.

Principals distributed the survey to **teachers of Year 0-2 students** at their school or to another teacher who was interested in completing the survey.

One survey response was submitted from each school.

Responses were received from **147 schools** (27% of the schools were decile 1-4).
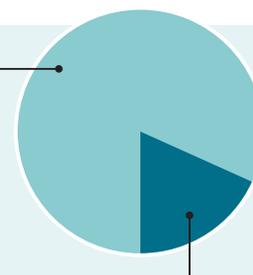
■ *Survey design*

The survey included 26 questions, which asked teachers about their views on aspects of the Ready to Read Phonics Plus series. These aspects included: PLD that teachers had received; the implementation of the books; the look and feel of the books; the book content; the appropriateness of the books; children's perceptions of the books; the lesson plans; the teaching notes; the support teachers had received; and teachers' engagement with whānau. Both quantitative and qualitative data was gathered.

Survey results

The majority of teachers reported that they had little or no previous experience using decodable books (63%) and nearly half of the teachers (48%) had not completed any professional learning and development (PLD) on the Ready to Read Phonics Plus series, structured literacy, or other decodable book series. Whilst relatively few teachers had accessed PLD on this series, many teachers indicated that their school intends to engage in professional learning on the Ready to Read Phonics Plus series in 2022. Figure 1 reports the percentage of respondents who completed PLD on the Ready to Read Phonics Plus series and the type of PLD they engaged in.

The following sections report some of the key findings from the Ready to Read Phonics Plus Evaluation Survey. These findings have been organised into four themes: the books, teacher support material, support provided to teachers, and whānau engagement.

Figure 1

Type of PLD Completed by Teachers

- 48%
- 23%
- 29%

■ None related to decodable texts
■ BSLA
■ Other PLD related to decodable texts
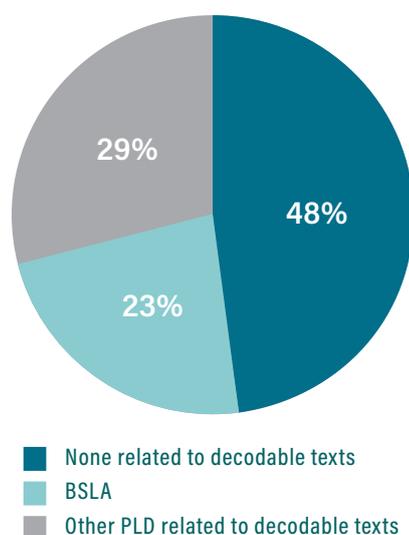
The books

Survey responses indicated that teachers were mostly positive about the books with a number of teachers commenting that children found the books very engaging and easy to relate to.

Over 70% of teachers reported that children enjoyed the characters in the Ready to Read Phonics Plus series (25% neutral). Many of the characters occur repeatedly throughout the Ready to Read Phonics Plus series. Teachers indicated that children liked coming across characters that they had met in previous books. They believed using characters that children recognised from their communities, representing a variety of cultures within the series, and using animals commonly found within New Zealand as characters within the books were all elements that contributed to students' enjoyment.

Teacher comment: "The children get attached to the characters in the books and use the characters in their writing."

Over 70% of teachers reported that children enjoyed the storylines in the Ready to Read Phonics Plus series and made connections between their own lives and the story narrative. Some teachers also believed that the use of humour in the texts/illustrations helped students to connect with the stories.

"They are very popular with my class and the students like the fact that the characters are featured in multiple books."

Over 80% of teachers reported that children liked the pictures in these books. Many teachers commented positively on the quality of the illustrations and the focus on New Zealand's plants and animals throughout the series. One teacher noted that the pictures did not match the words, which indicates there may be some confusion about how pictures are used within decodable books. Figure 2 illustrates teachers' responses to questions that asked about students' enjoyment of the illustrations, storylines, and characters.

"I like that the texts have a New Zealand feel and have beautiful illustrations."

Figure 2

Students' Response to Aspects of the Books – Reported by Teachers
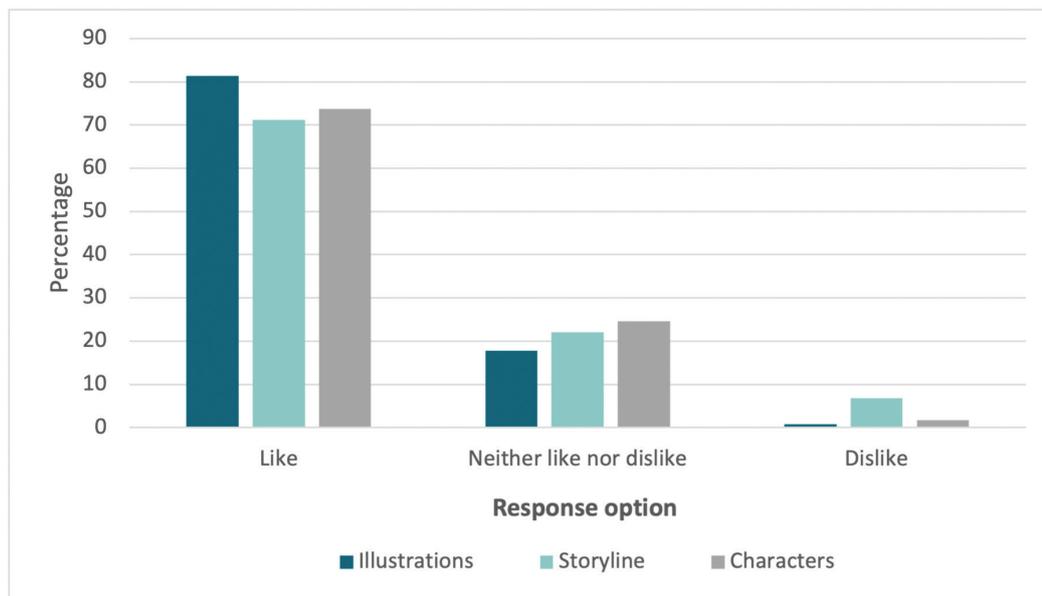
Teachers were asked how they felt about the inclusion of kupu Māori and the rate that these words were introduced within the series. Generally, teachers were positive about the introduction of kupu Māori within the books. Around half of all teachers believed the kupu introduced in these books, and the rate of introduction, was appropriate. However, some teachers commented that kupu Māori should not be introduced in these books because the relationship between some phonemes and graphemes in te reo is different to the relationship in English, which makes them more difficult for students to decode. This belief may be related to the type of PLD that teachers received. Teachers who had taken part in the BSLA training were more positive about the introduction of kupu Māori. Over 60% of teachers who completed the BSLA training believed that the kupu included in these books, and the rate that these words were introduced, was appropriate for beginning readers. In contrast, teachers who participated in other structured literacy PLD or PLD on other decodable texts were less positive about the introduction of kupu Māori. Figures 3 and 4 report teachers' responses to questions that asked about the appropriateness of kupu Māori and the rate that these words were introduced by the type of PLD that teachers completed.

> "The te reo Māori is great, thank you for finally including this in the lower levels of books."

Figure 3

Inclusion of Kupu Māori in Decodable Books
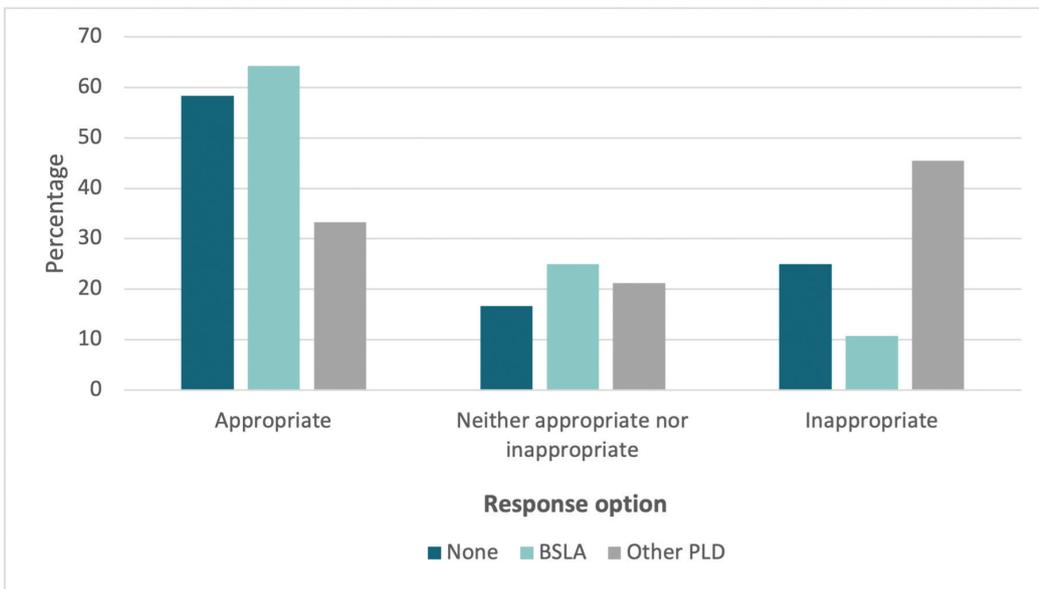
Figure 4

Rate of Kupu Māori Introduction
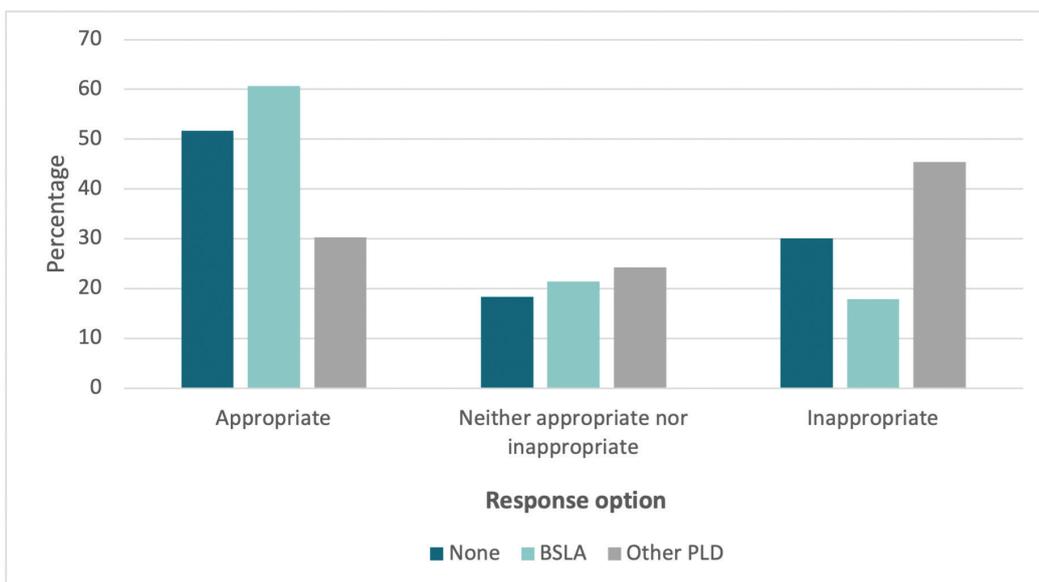
Note. Percentages were calculated for each PLD category.

Teachers were asked how appropriate they found the introduction of decodable and high utility words within these books. Most teachers (66%) reported that the books included an appropriate number of decodable words. However, 19% of teachers believed that the number of decodable words was inappropriate with some teachers reporting that the scope and sequence, which underpins the books, moves too quickly, giving children insufficient practice opportunities. This perception was related to the type of PLD that teachers completed: 80% of teachers who completed the BSLA training were satisfied with the scope and sequence that underpins these books and 85% of these teachers thought there was an appropriate number of decodable words in each book. This compares to only (29%) of teachers who engaged in alternative structured literacy or decodable book PLD who were satisfied with the scope and sequences and 60% of these teachers thought there was an appropriate number of decodable words.

Figure 5

Introduction of Decodable Words
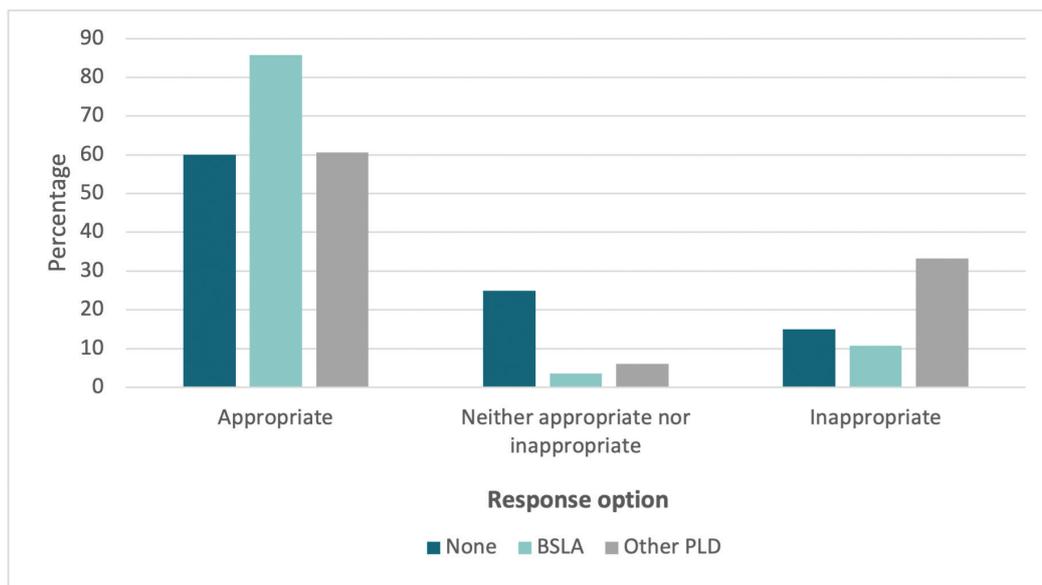
Figure 6

Introduction of High-Utility Words
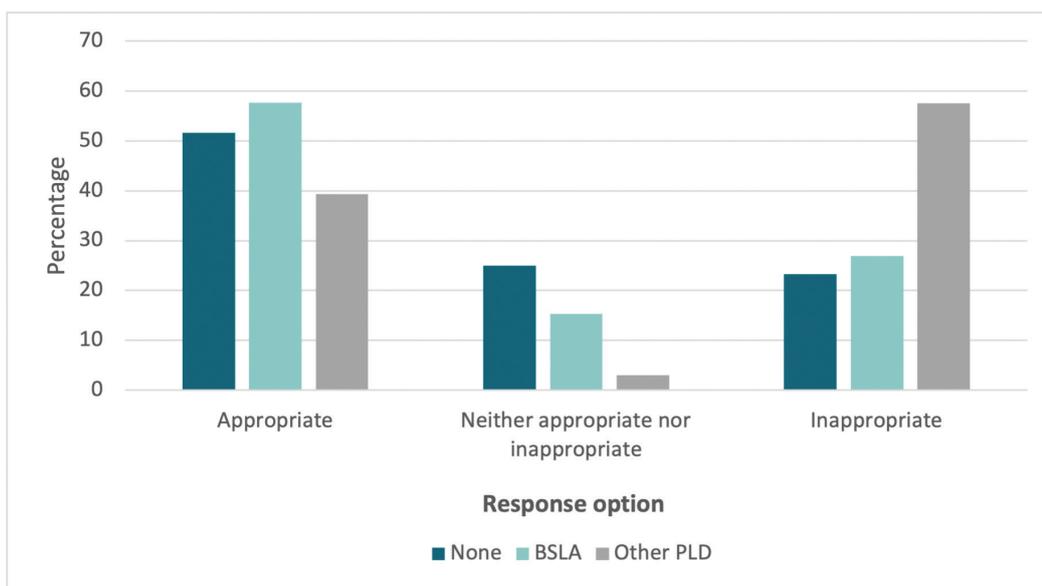
Note. Percentages were calculated for each PLD category.

The support materials

Teachers were asked how helpful they found the teacher support material. Some teachers noted that they were not aware that additional support material was available on the TKI website and others noted that material on the website was difficult to locate. As expected, teachers who completed the BSLA training were more likely to report that they were satisfied with the support provided on the TKI website (54%) than teachers who had completed no PLD on this series (32%) or PLD on an alternative structured literacy or decodable book series (40%). This may indicate that teachers who complete the BSLA training are more aware of the resources available on the TKI website.

In total, 85% of teachers reported that they were satisfied with the teaching notes provided at the back of each book. The type of PLD that teachers completed did not influence their perception of this material. These results are illustrated in Figure 7. Teachers believed that the notes at the back of each book were easy to understand (81%), followed on logically from the books (82%), were easy for anyone to use (70%), and supported children's learning (78%).

> "The lesson plans at the back of the book are what saved me. I was taught in the generation that did not get phonics teaching at university." ”

> "These teaching notes are really helpful for teachers who are unfamiliar with how to teach using decodable texts." ”

Figure 7

Supporting Notes
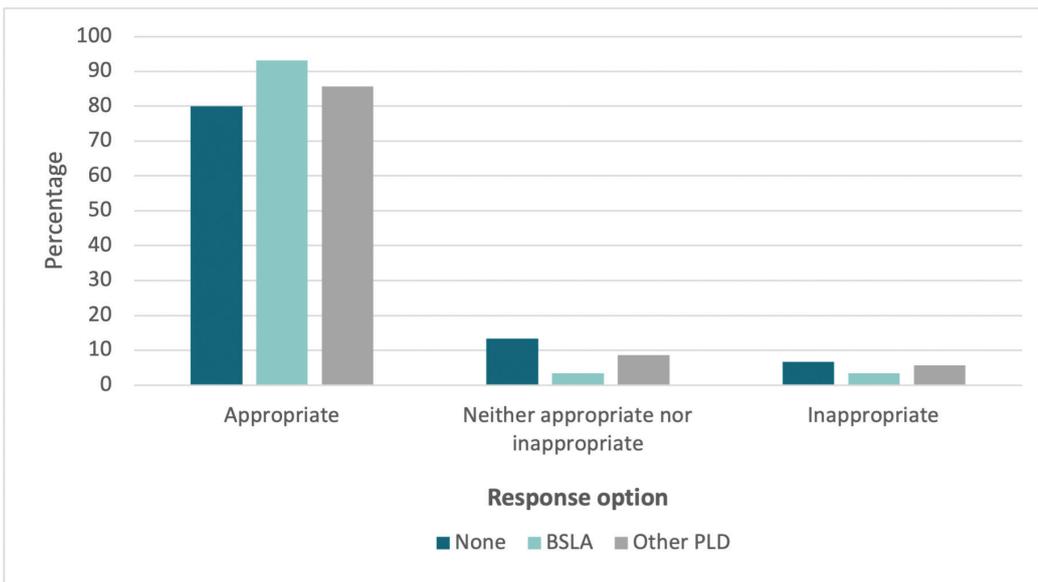
Note. Percentages were calculated for each PLD category.

Support implementing the Ready to Read Phonics Plus series

Over 70% of teachers who were involved in the BSLA reported that they felt adequately supported to use the readers. Other teachers felt they had limited support to use the readers. A number of teachers reported that it was difficult for them to access the Ready to Read Phonics Plus teacher support materials online. Many teachers expressed a desire to engage in the BSLA PLD and were interested to learn more about the application process. Figure 8 illustrates teachers' responses to a question that asked about the level of support they had experienced implementing the Ready to Read Phonics Plus series.

Figure 8

**Support to Implement the Ready to Read Phonics Plus Series**
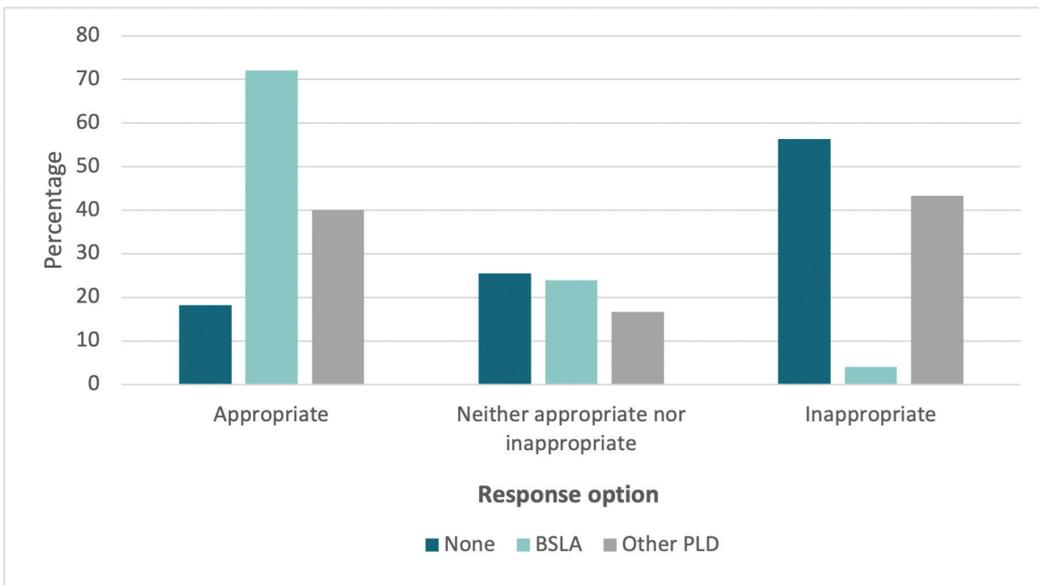
Whānau engagement

Teachers involved in BSLA were more likely to report that their school had engaged with whānau than other teachers who had not engaged in PLD or engaged in a different form of PLD (see Figure 9). Over 90% of teachers who were involved in BSLA PLD reported that they engaged with whānau. These teachers shared positive comments that they received from whānau about the books. One whānau noted that they were amazed at how quickly their child began to independently read these books using his knowledge of letter-sound relationships. Other teachers reported that they had received positive comments about the books from whānau and one teacher noted that their parents were "buzzing" because their children were becoming more confident readers.

"The parents are buzzing (about these new readers) as their child is gaining confidence and a can do attitude."

Whānau comment "Keep these books coming!!"

Figure 9

Engagement with Whānau
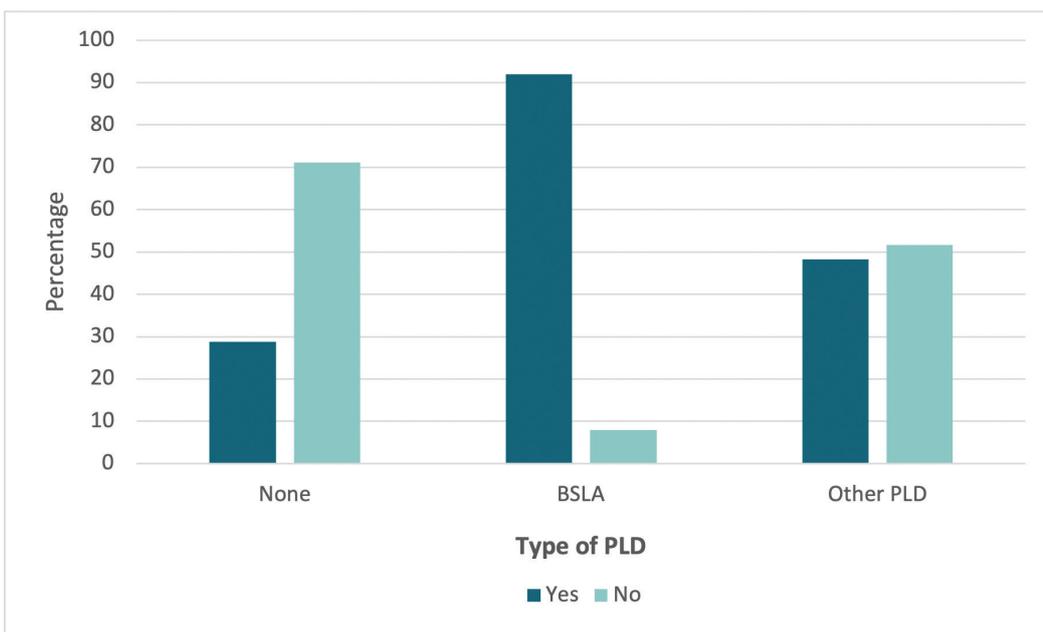
Summary of survey findings

A robust survey methodology was used to understand teachers' initial perceptions of the Ready to Read Phonics Plus series. Overall the teachers were very positive about the high quality look and feel of the books, beautiful illustrations and New Zealand story themes. Teachers reported the children were motivated and engaged in reading the texts and enjoyed the characters introduced in the series. The teachers valued the teacher notes at the back of the books but some found it difficult to access the online teacher support materials on TKI. Teachers' perceptions as to the appropriateness of the level of decodable words, high utility words and use of kupu Māori in the texts differed according to the type of PLD they received. Teachers who were involved in the BSLA PLD were much more positive about these aspects of the books and felt supported to use these new readers compared to teachers who had received other types of PLD or were unfamiliar with the use of decodable texts. The survey only asked about the first 37 books in the series after they had been in schools for a relatively short period of time. The survey data are very encouraging and suggest the new readers will be well used to support the early reading development of tamariki throughout New Zealand.

References

Archer, A., & Hughes, C. (2011). *Explicit Instruction: Effective and efficient teaching*. Guilford Publications.

Arrow, A., & Tunmer, W. (2012). Contemporary reading acquisition. The conceptual basis for differentiated reading instruction. In S. Suggate & E. Reese (Eds.), *Contemporary debates in childhood education and development* (pp. 241–249). Routledge. https://doi.org/10.4324/9780203115558-38

Beverly, B. L., Giles, R. M., & Buck, K. L. (2009). First-grade reading gains following enrichment: Phonics plus decodable texts compared to authentic literature read aloud. *Reading Improvement*, *46*(4), 191-206.

Boggio, C., Bosse, M.L., Pobel-Burtin, C., Perthué, V., & Bianco, M. (2021). *What proportion of decodable words in a text is most beneficial for early reading instruction?* [Conference presentation]. British Dyslexia Association's International Conference 2021, Oxford, United Kingdom. https://hal.archives-ouvertes.fr/hal-03245270

Byrne, B. (2005). Theories of learning to read. In M. J. Snowling & C. Hulme (Eds.), *The Science of Reading: A Handbook* (pp. 104-119). Blackwell.

Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest, 19*(1), 5–51. https://doi.org/10.1177/1529100618772271

Tunmer, W. E., & Chapman, J. W. (2012). Does set for variability mediate the influence of vocabulary knowledge on the development of word recognition skills? *Scientific Studies of Reading, 16*(2), 122-140. https://doi.org/10.1080/10888438.2010.542527

Chapman, J., Arrow, A., Braid, C., Greaney, K., & Tunmer, W. (2018). *Early literacy research project. Final report to the New Zealand Ministry of Education*. Massey University. https://www.educationcounts.govt.nz/publications/schooling/early-literacy-research-project

Cheatham, J. P., & Allor, J. H. (2012). The influence of decodability in early reading text on reading achievement: A review of the evidence. *Reading and Writing: An interdisciplinary Journal, 25*(9), 2223-2246. https://doi.org/10.1007/s11145-011-9355-2

Chu, M.C., & Chen, S.H. (2014). Comparison of the effects of two phonics training programs on L2 word reading. *Psychological Reports, 114*(1), 272-291. https://doi.org/10.2466/28.10.PR0.114k17w0

Connelly, V., Johnston, R., & Thompson, G. B. (2001). The effect of phonics instruction on the reading comprehension of beginning readers. *Reading & Writing, 14*(5-6), 423-457.

Connor, C. M., Morrison, F. J., Fishman, B., Crowe, E. C., Al Otaiba, S., & Schatschneider, C. (2013). A longitudinal cluster-randomized controlled study on the accumulating effects of individualized literacy instruction on students' reading from first through third Grade. *Psychological Science, 24*(8), 1408-1419. https://doi.org/10.1177/0956797612472204

Connor, C. M., Spencer, M., Day, S. L., Giuliani, S., Ingebrand, S. W., McLean, L., & Morrison, F. J. (2014). Capturing the complexity: Content, type, and amount of instruction and quality of the classroom learning environment synergistically predict third graders' vocabulary and reading comprehension outcomes. *Journal of Educational Psychology, 106*(3), 762-778. https://doi.org/10.1037/a0035921

de Graaff, S., Bosman, A. M. T., Hasselman, F., & Verhoeven, L. (2009). Benefits of systematic phonics instruction. *Scientific Studies of Reading*, 13(4), 318 - 333. https://doi-org.ezproxy.canterbury.ac.nz/10.1080/10888430903001308

Deacon, S. H., Mimeau, C., Chung, S. C., & Chen, X. (2019). Young readers' skill in learning spellings and meanings of words during independent reading. *Journal of Experimental Child Psychology, 181*, 56-74. https://doi.org/10.1016/j.jecp.2018.12.007

Denton, C. A., Fletcher, J. M., Taylor, W. P., Barth, A. E., & Vaughn, S. (2014). An experimental evaluation of guided reading and explicit interventions for primary-grade students at-risk for reading difficulties. *Journal of Research on Educational Effectiveness, 7*(3), 268-293. https://doi.org/10.1080/19345747.2014.906010

Dougherty Stahl, K. A., Keane, A. E., & Simic, O. (2013). Translating policy to practice: Initiating RTI in urban schools. *Urban Education, 48*(3), 350-379. https://doi.org/10.1177/0042085912451755

Duranovic, M., Senka, S., & Babic-Gavric, B. (2018). Influence of increased letter spacing and font type on the reading ability of dyslexic children. *Annals of Dyslexia, 68*(3), 218-228. https://doi.org/10.1007/s11881-018-0164-z

Ehri, L. C. (2005). Development of sight word reading: Phases and findings. In M. J. Snowling & C. Hulme (Eds.), *The science of reading: A handbook.* (pp. 135-154). Blackwell Publishing.

Elbro, C., & de Jong, P. F. (2017). Orthographic learning is verbal learning: The role of spelling pronunciations. In K. Cain, D. L. Compton, & R. K. Parilla (Eds.), *Theories of reading development* (pp. 169-190). John Benjamins Publishing.

Fisher, D., & Frey, N. (2012). Close reading in elementary schools. *The Reading Teacher, 66*(3), 179-188. https://doi.org/doi:10.1002/TRTR.01117

Foorman, B. R., Beyler, N., Borradaile, K., Coyne, M., Denton, C., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L. M., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R. K., & Wissel, S. (2016). Foundational skills to support reading for understanding in kindergarten through 3rd grade. Educator's Practice Guide. NCEE 2016-4008. *What Works Clearing House.*

Galliussi, J., Perondi, L., Chia, G., Gerbino, W., & Bernardis, P. (2020). Inter-letter spacing, inter-word spacing, and font with dyslexia-friendly features: Testing text readability in people with and without dyslexia. *Annals of Dyslexia, 70*(1), 141-152. https://doi.org/10.1007/s11881-020-00194-x

Gillon, G. (2018). *Phonological Awareness: From Research to Practice* (2nd ed.). New York: The Guilford Press.

Gillon, G., McNeill, B., Scott, A., Denston, A., Wilson, L., Carson, K., & Macfarlane, A. H. (2019). A better start to literacy learning: Findings from a teacher-implemented intervention in children's first year at school. *Reading & Writing, 32*(8), 1989–2012. https://doi.org/10.1007/s11145-018-9933-7

Gillon, G., McNeill, B., Scott, A., Denston, A., Wilson, L., Carson, K., & Macfarlane, A. H. (2019). A better start to literacy learning: findings from a teacher-implemented intervention in children's first year at school. Reading and Writing, 32(8), 1989-2012. https://doi.org/10.1007/s11145-018-9933-7

Gillon, G., McNeill, B., Scott, A., Arrow, A. & Macfarlane, A. H. (in review). A strengths-based approach to early reading instruction (paper in review).

Gough, P., & Tunmer, W. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*(1), 6–10. https://doi.org/10.1177/074193258600700104

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement.* Routledge.

Hoover, W. A., & Tunmer, W. E. (2018). The simple view of reading: Three assessments of its adequacy. *Remedial and Special Education, 39*(5), 304-312. https://doi.org/10.1177/0741932518773154

Johnston, R. S., McGeown, S., & Watson, J. E. (2012). Long-term effects of synthetic versus analytic phonics teaching on the reading and spelling ability of 10 year old boys and girls. *Reading and Writing: An interdisciplinary Journal, 25*(6), 1365-1384. https://doi.org/10.1007/s11145-011-9323-x

Jones, C. D., Clark, S. K., & Reutzel, D. R. (2013). Enhancing alphabet knowledge instruction: Research implications and practical strategies for early childhood educators. *Early Childhood Education Journal, 41*(2), 81-89. https://doi.org/10.1007/s10643-012-0534-9

Juel, C., & Minden-Cupp, C. (2000). Learning to read words: Linguistic units and instructional strategies. *Reading Research Quarterly, 35*(4), 458-504. https://doi.org/10.1598/rrq.35.4.2

Justice, L. M., Pence, K., Bowles, R., & Wiggens, A. (2006). An investigation of four hypotheses concerning the order by which 4-year-old children learn the alphabet letters. *Early Childhood Research Quarterly, 21*(3), 374-389. https://doi.org/10.1016/j.ecresq.2006.07.010

Kuster, S. M., van Weerdenburg, M., Gompel, M., & Bosman, A. M. T. (2018). Dyslexie font does not benefit reading in children with or without dyslexia. *Annals of Dyslexia, 68*(1), 25-42. https://doi.org/10.1007/s11881-017-0154-6

Loveall, S. J., Channell, M. M., Phillips, B. A., & Conners, F. A. (2013). Phonological recoding, rapid automatized naming, and orthographic knowledge. *Journal of Experimental Child Psychology, 116*(3), 738-746. https://doi.org/10.1016/j.jecp.2013.05.009

Marinus, E., Mostard, M., Segers, E., Schubert, T. M., Madelaine, A., & Wheldall, K. (2016). A special font for people with dyslexia: Does it work and, if so, why? *Dyslexia, 22*(3), 233-244. https://doi.org/10.1002/dys.1527

McMurray, S. (2020). Learning to spell for children 5–8 years of age: The importance of an integrated approach to ensure the development of phonic, orthographic and morphemic knowledge at compatible levels. *Dyslexia, 26*(4), 442-458. https://doi.org/https://doi.org/10.1002/dys.1663

Mesmer, H. A. E. (2000). Decodable text: A review of what we know. *Reading Research and Instruction, 40*(2), 121-141. https://doi.org/10.1080/19388070109558338

Mesmer, H. A. E. (2009). Textual scaffolds for developing fluency in beginning readers: Accuracy and reading rate in qualitatively levelled and decodable text. *Literacy Research and Instruction*, *49*(1), 20-39. https://doi.org/10.1080/19388070802613450

Mimeau, C., Ricketts, J., & Deacon, S. H. (2018). The role of orthographic and semantic learning in word reading and reading comprehension. *Scientific Studies of Reading, 22*(5), 384-400. https://doi.org/10.1080/10888438.2018.1464575

Ministry of Education. (2021, June 9). *Tau mai te reo.* https://www.education.govt.nz/our-work/overall-strategies-and-policies/tau-mai-te-reo/tau-mai-te-reo-the-maori-language-in-education-strategy-english/

Moll, L. C., Amanti, C., & Neff, D. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice, 31*, 132-141. https://doi.org/10.1080/00405849209543534

Murray, B. A., McIlwain, M. J., Wang, C.H., Murray, G., & Finley, S. (2019). How do beginners learn to read irregular words as sight words? *Journal of Research in Reading, 42*(1), 123-136. https://doi.org/10.1111/1467-9817.12250

Perfetti, C., & Stafura, J. (2014). Word knowledge in a theory of reading comprehension. *Scientific Studies of Reading, 18*(1), 22-37. https://doi.org/10.1080/10888438.2013.827687

Price-Mohr, R., & Price, C. (2020). A comparison of children aged 4–5 years learning to read through instructional texts containing either a high or a low proportion of phonically-decodable words. *Early Childhood Education Journal, 48*(1), 39-47. https://doi.org/10.1007/s10643-019-00970-4

Pritchard, S. C., Coltheart, M., Marinus, E., & Castles, A. (2018). A computational model of the self-teaching hypothesis based on the dual-route cascaded model of reading. *Cognitive Science, 42*(3), 722–770. https://doi.org/10.1111/cogs.12571

Ricketts, J., Bishop, D. V. M., Pimperton, H., & Nation, K. (2011). The role of self-teaching in learning orthographic and semantic aspects of new words. *Scientific Studies of Reading, 15*(1), 47-70. https://doi.org/10.1080/10888438.2011.536129

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? Reading Research Quarterly, 55(4), 573-600. https://doi.org/https://doi.org/10.1002/rrq.284

Savage, R., Georgiou, G., Parrila, R., & Maiorino, K. (2019). Preventative reading interventions teaching direct mapping of graphemes in texts and set-for-variability aid at-risk learners. *Scientific Studies of Reading, 22*(3), 225-247. https://doi.org/10.1080/10888438.2018.1427753

Savage, R., Georgiou, G., Parrila, R., Maiorino, K., Dunn, K., & Burgos, G. (2020). The effects of teaching complex grapheme-phoneme correspondences: Evidence from a dual site cluster trial with at-risk Grade 2 students. *Scientific Studies of Reading*, 24(4), 321-337. https://doi.org/10.1080/10888438.2019.1669607

Share, D. L. (1995). Phonological recoding and self-teaching: *Sine qua non* of reading acquisition. *Cognition, 55*(2), 151-218.

Solity, J. E. (2020). Instructional psychology and teaching reading: Ending the reading wars. *The Educational and Developmental Psychologist, 37*(2), 123-132. https://doi.org/10.1017/edp.2020.18

Steacy, L. M., Wade-Woolley, L., Rueckl, J. G., Pugh, K. R., Elliott, J. D., & Compton, D. L. (2019). The role of set for variability in irregular word reading: Word and child predictors in typically developing readers and students at-risk for reading disabilities. *Scientific Studies of Reading, 23*(6), 523-532. https://doi.org/10.1080/10888438.2019.1620749

Sunde, K., Furnes, B., & Lundetræ, K. (2019). Does introducing the letters faster boost the development of children's letter knowledge, word reading and spelling in the first year of school? *Scientific Studies of Reading*, *24*(2), 141-158. https://doi.org/10.1080/10888438.2019.1615491

Toppel, K. (2015). Enhancing core reading programs with culturally responsive practices. *The Reading Teacher, 68*(7), 552-559. https://doi-org.ezproxy.canterbury.ac.nz/10.1002/trtr.1348

Tunmer, W., & Greaney, K. (2010). *Defining dyslexia. Journal of Learning Disabilities*, 43(3), 229-243. https://doi.org/10.1177/0022219409345009

Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2020). Preschool instruction in letter names and sounds: Does contextualized or decontextualized instruction matter? *Reading Research Quarterly, 55*(4), 573-600. https://doi.org/https://doi.org/10.1002/rrq.284

Zipke, M. (2016). The importance of flexibility of pronunciation in learning to decode: A training study in set for variability. *First Language, 36*(1), 71-86. https://doi.org/10.1177/0142723716639495

Appendix 1

Development process

Project scope
- Understanding the project's goals and purpose
- Identification of what needs to be completed to align with the colour wheel
- Genre allocation – realistic fiction and nature fantasy fiction
- Illustration styles chosen
- Timeline steps identified
- Editor and proofreader appointed
- Contracts signed

First review
- MOE REVIEW 1: overview sent to MOE for review of genre, characters and scope and sequence allocation
- Revise plan based on feedback from REVIEW 1

The stories begin
- Draft story concepts
- Authors recruited. Author/s provided with guidelines including phonics features, genre, desired characters, number of words or sentences, and length of book

Illustrators in action
- Illustrators contracts confirmed
- Timeline deliverables set
- Characters sketches confirmed
- First drafts of books generated and have first internal review; edited first draft sent to illustrators with picture brief
- Illustration roughs begin
- UC REVIEW 1

Production starts
- Production steps identified
- Book size confirmed
- Style guides created
- Book concept and development for cover and internals
- Book design confirmed

Proofing stage one
- UC REVIEW 2 of illustration roughs
- Authors generate 2nd or 3rd drafts with internal reviews between. At this point scripts are sent to Smartwork Creative for setting in files with initial rough draft illustrations.
- Stories supplied

First books
- First proof: stories and Illustrator roughs placed

Proofing stage two

- Comments taken in for Illustrator roughs
- Corrections to text
- UC REVIEW 3

Second review

- MOE REVIEW 2: First roughs sent to MOE for a review of content, story line and scope and sequence allocation and use
- Revisions made based on feedback alongside another round of internal review

School trials begin

- Draft teaching notes for the back of books developed
- Draft lesson plans developed and uploaded to DropBox to share with trial teachers
- Print-ready PDFs generated and sent to internal printers to create trial versions
- Trial versions sent to schools alongside requests for feedback. This was to be in-person but COVID led to all being online feedback

Proofing stage three

- Feedback taken in from MOE
- School feedback compiled and reviewed
- Adjustments made from school trials
- Books sent to various reviewers for feedback on the relevant areas including cultural review
- Illustrators coloured art placed
- UC REVIEW 4
- Revisions generated and changes made to scripts and illustrations as necessary. Revised teacher notes added to files

Third review

- MOE REVIEW 3: Second MOE drafts sent for review of script, scope and sequence use and MOE level revisions of checks required
- IP check completed
- Culture review completed

External checks

- Punctuation edit
- Structural edit
- Proofread
- Internal editor carries out copy-editor and series-editor checks (Tranche 3 & 4 only)
- IP documents filed

Fourth review

- MOE REVIEW 4: Almost final versions sent to MOE with ISBN, item numbers, all final detail included as it aligns with the phases. TSMs sent with final versions (Tranche 3 & 4 only)
- Revisions generated and changes made to scripts and illustrations as necessary.

Final review

- UC REVIEW 5
- MOE REVIEW 5: Final submission of print-ready files
- Revisions generated and changes made to scripts and illustrations as necessary.

Finished art

- Final UC checks
- Preflight checks and files packaged

Print Production

- UView online proof checked
- MOE sign off on hard copy proof

Support Materials

- Teacher notes created
- Audio files recorded

Printing & Distribution

Launch