Elevate & Evaluate

What teachers need to teach and what students need to learn about written English

Years 1–4/Grades K–3

GROWING TEACHER KNOWLEDGE

ASSESSING STUDENT KNOWLEDGE

EVALUATING EVIDENCE

SAMPLE PAGES

Joy M. Allcock

Foreword by Professor John Hattie

Foreword

The debates about optimal methods to teach early reading continue. The answer, surely, is simple — if students do not have the skills to read, then teach them the skills; when they have some skills to read, then help them enjoy the meaning, the thrill, and the messages from the readings. It is not either/or, it is for what purpose and when. As Allcock notes, "Unlike learning a sport, students can't decide literacy is not for them. Being able to read and write fluently is critical in today's world."

My research has shown the devasting impact of the Matthew effect — if students do not have basic literacy skills by age 8, they rarely catch up. There should be NO child left behind at age 8. Likewise, no teacher should be left behind who does not have the skills and knowledge to succeed in teaching literacy skills. There are so many classes with 100% success. This book is based on supporting teachers to reach this goal, as the cost of failure is simply too high.

With this book, the 'Queen' of teaching reading, writing, and spelling skills is giving us another gem. Thank goodness for authors like Joy Allcock who get the messages right — and for her relentless focus across many books on teaching the skills for learning to read, write, and spell. She notes that learning these skills depends on knowledge and skills about print and oral language. The latter is so often forgotten; indeed, the 'Big Five' of reading — phonemic awareness, phonics, fluency, vocabulary, and comprehension — should be the 'Big Seven', with the addition of oral language and listening (as phonemic awareness and phonics both depend on great listening). No wonder the approach elaborated in this book is so powerful.

Allcock identifies these skills and notes how priorities can differ for reading, writing, and spelling. Learning the most common graphemes may aid reading, but writing can invoke many words with graphemes outside this common set. Reading is a print-to-speech task, whereas writing is a speech-to-print task. There is, however, much crossover. Learning can be accelerated across all domains by using the crossover methods outlined in this book.

And so, to the richness of the resources in this book. The resources and assessments throughout this book are a step above most programs. They are derived from many years of working in schools, developing programs and

assessments that have been subjected to rigorous academic evaluation, and collaborating with teachers to ensure that the resources created are easy to use and work in real classrooms. This extensive work has given Allcock much clarity about teacher knowledge, and about the value of using a linguistic phonics approach, which has significant advantages for teaching the alphabetic code.

Allcock invites teachers to focus on teaching students to recognize and write the sounds in words they know and to understand the diversity that exists in the ways we record sounds and pronounce graphemes. I love this approach, as there is so much evidence that learning to write has powerful effects on the acquisition of other literacy skills. Her explicit and systematic approach highlights the power of learning to write the code, which leads to great improvements in reading, writing, and spelling. No child — and no teacher — is left behind.

This book is a *Joy* to read. So go forth and implement to achieve the goal of 100% literacy success.

John Hattie, Ph.D.

Professor John Hattie, Director of the Melbourne Educational Research Institute at the University of Melbourne, Australia, has long focused his research on what works best for learning in schools. His groundbreaking books, *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement* (2008) and *Visible Learning: The Sequel, A Synthesis of Over 2,100 Meta-Analyses Relating to Achievement* (2023), document what is believed to be the world's largest evidence-based study into the factors that improve student learning. Those works along with his many professional learning resources for educators have earned Professor Hattie international acclaim, the *Times Educational Supplement* calling him "possibly the world's most influential education academic".

Contents

Note: This table of contents represents the full content of *Elevate & Evaluate*. The sections with page references are included in this sample.

Inside this book

Elevate & Evaluate supports teachers with the knowledge and resources to elevate their instruction and evaluate student achievement.

GROWING TEACHER KNOWLEDGE

The resources in this section provide helpful background information and concrete support for teaching the code and structure of written English. Topics covered include:

- **Effective literacy instruction** — what research shows about effective instructional practices.
- **The systems of English** — the phonological (sound), orthographic (writing), and morphological (meaning) structure of the English language.
- **Teacher knowledge assessment** — a comprehensive assessment that allows teachers to quickly identify and address any potential gaps in their knowledge of how English works.
- **What teachers need to teach** — essential literacy skills for beginning writers and readers in the most critical areas of literacy development.
- **Pronunciation guide** — the sounds of English and how they are pronounced.
- **Consonant blends and consonant digraphs** — the difference between these and an overview of common consonant blends and digraphs.
- **Vowel sounds of English** — the vowel sounds and tips for how to spell and read them.
- **Syllable structures** — how to recognise the different types of syllables and to pronounce and spell them correctly.
- **Useful spelling rules** — the most useful and reliable spelling rules for teaching to students in the early years.
- **Scope and sequence** — what skills are taught in the Code-Ed resources and how they build across the first four years.
- **Literacy development** — how students learn to write, spell, and read, and how to support their development with assessment-driven instruction.
- **Teaching decoding** — how to teach essential decoding skills at each stage of reading development, using regular 'non-decodable' books.
- **Literacy delays and difficulties** — common reasons why students struggle with reading and writing, and ways to address them.
- **Literacy glossary** — a glossary of common literacy terms, included at the back of this book for easy reference.

Teachers can use the support materials to work alone or collaboratively with their peers to enhance their knowledge of these key areas of instruction. Many of the resources are accompanied by video presentations on the Code-Ed website (www.code-ed.co.nz).

ASSESSING STUDENT KNOWLEDGE

This section includes assessment essentials and timelines, yearly achievement expectations, and a full suite of assessment instruments for the first four years of school.

The assessments progress from an observational assessment of foundational literacy skills to assessments that measure phonological and phonemic awareness skills, knowledge of letter names and sounds, simple and advanced code knowledge, and knowledge of conventions that influence the spelling and pronunciation of words. The assessments include:

- **Foundations for literacy**
- **Phonological and phonemic awareness**
- **Grapheme knowledge**
- **Letter formation**
- **Sound-to-letter knowledge**
- **Pseudoword spelling**
- **Blends**
- **Short and long vowel discrimination**
- **Spelling knowledge**
- **Spelling analysis**
- **Decoding analysis**

These assessments can be used to drive instruction, to track progress, and to measure the impact of instruction on student achievement.

EVALUATING EVIDENCE

This section presents the research foundations behind the speech-to-sounds-to-print approach that underpins all of the Code-Ed resources, including a summary of the *Shine* Literacy Project, which validated the efficacy of the approach, and evidence of the reliability, validity, and significance of the Code-Ed assessments.

GROWING TEACHER KNOWLEDGE

The resources in this section provide helpful background information and concrete support for teaching the code and structure of written English.

Effective literacy instruction

The research is clear that effective literacy instruction in the early years is critical for future academic success. Studies have also found that if children do not receive effective instruction, particularly in the first two years of school, they are not likely to catch up with their peers. The way literacy instruction is provided when students start school can set them up for success or struggle.

What does effective literacy instruction look like?

To become fluent readers who understand what they read and capable authors who can share their ideas in print, students need to master a broad range of skills and knowledge. From the very start of their literacy journey, they need to learn how written words work. This **word-level knowledge** is the platform for learning to read, write, and spell.

To write words, students need:

- An understanding that spoken words are made up of individual sounds and that words can be separated into sounds.
- To break words into chunks of sound and individual sounds.
- To know that sounds can be written in different ways with one or more letters.
- To learn to represent all the sounds of English with letters and letter patterns.
- To know that words can be spelled in particular ways.

To read words, students need:

- To recognise the letters and letter patterns that represent the sounds of English.
- To know that a letter or letter pattern could be pronounced in different ways.
- To know that blending sounds together provides the pronunciation of a word.
- To blend sounds together to pronounce words.

The ability to work with words like this lays the foundation for more complex literacy skills and knowledge. **The way word-level knowledge is taught** determines how well students will master these critical foundational skills.

Explicit instruction

Writing and reading are complex processes. Just as learning a sport requires the player to master a range of skills and knowledge and to understand how to use them, so does learning to read and write. Some children pick up skills effortlessly and master them with only a small amount of practice. Others take longer, and some decide that what they are learning is not for them because it too difficult or frustrating. But unlike learning a sport, students can't decide literacy is not for them. **Being able to read and write fluently is critical in today's world**.

The way we teach children to read and write has to be successful. Research shows that virtually all children benefit from explicit instruction, but especially children who, for whatever reason, don't have some of the important foundational skills when they start school.

Explicit instruction for literacy is simply targeting the knowledge and skills that research has shown to be essential, and ensuring they are taught in a logical, sequential, and explicit way. It means teaching students to understand what is involved in learning to read and write. It means finding out what skills and knowledge students already have and where they have gaps. It means using assessment to drive instruction — to teach the skills and knowledge students have not mastered but need to learn. It means differentiating instruction to include whole-class instruction as well as targeted instruction and practice for individuals and groups of students who need it.

The way we teach early literacy skills must ensure that all students have the foundations in place to become successful readers and writers. Teaching essential skills and knowledge explicitly is the best way to ensure this happens.

The linguistic phonics approach

The human brain is hardwired to learn oral language. We learn to listen and speak through exposure to the spoken word. Phonological awareness is part of the oral language system — the system the brain intuitively develops from hearing spoken words. We know that phonological and phonemic awareness skills are critical foundations for working with written words.

A linguistic phonics approach uses what students already know and are tuned in to (spoken words) as a platform for developing an awareness of the sounds that make up words. It capitalises on the sensitivity of the brain to oral language. However, developing phonological and phonemic awareness skills still requires explicit instruction and practice so that students develop a conscious awareness of sounds and sound patterns in words.

To learn how an alphabetic language works, students must understand the alphabetic principle — they must know that the words we say are made of sounds and that we can write each sound using letters of the alphabet. A linguistic phonics approach makes this easy to teach by working from speech to sounds to print.

For example, several students might have the **/k/** sound in their names. By saying their names (**speech**) and isolating the **/k/** sound (**to sound**), they can see how the **/k/** sound can be written in different ways (**to print**):

- Caitlin has the **/k/** sound at the beginning of her name, and we write it with the letter ***c***. **C**aitlyn — **/k/** — ***c***.
- Kyle has the **/k/** sound at the beginning of his name, and we write it with the letter ***k***. **K**yle — **/k/** — ***k***.
- Christina has the **/k/** sound at the beginning of her name, and we write it with the letters ***ch***. **Ch**ristina — **/k/** — ***ch***.
- Jack has the **/k/** sound at the end of his name, and we write it with the letters ***ck***. Ja**ck** — **/k/** — ***ck***.

This process is called **orthographic mapping** — the process of connecting sounds with the letters and letter patterns that represent them. Learning to hear, then write, a sound — working from the known to the unknown — produces a **more secure map of the code** (stronger orthographic mapping) than learning to recognise and pronounce a grapheme — working from the unknown to the known.

A linguistic phonics approach provides a fast way of teaching students how print works at the word level.

- **Explicit, direct instruction about hearing and recording sounds** builds knowledge of the code for writing and allows students to discover the diversity of the code from the outset.
- **Explicit instruction in decoding words** supports the transfer of students' code knowledge to reading.

Building word-level knowledge is the key to literacy learning in the early years at school. Ensuring students understand how spoken and written words work, using a direct, explicit approach, teaching knowledge in a sequenced and systematic way, and using a linguistic phonics (speech to sounds to print) approach will set students up for literacy success.

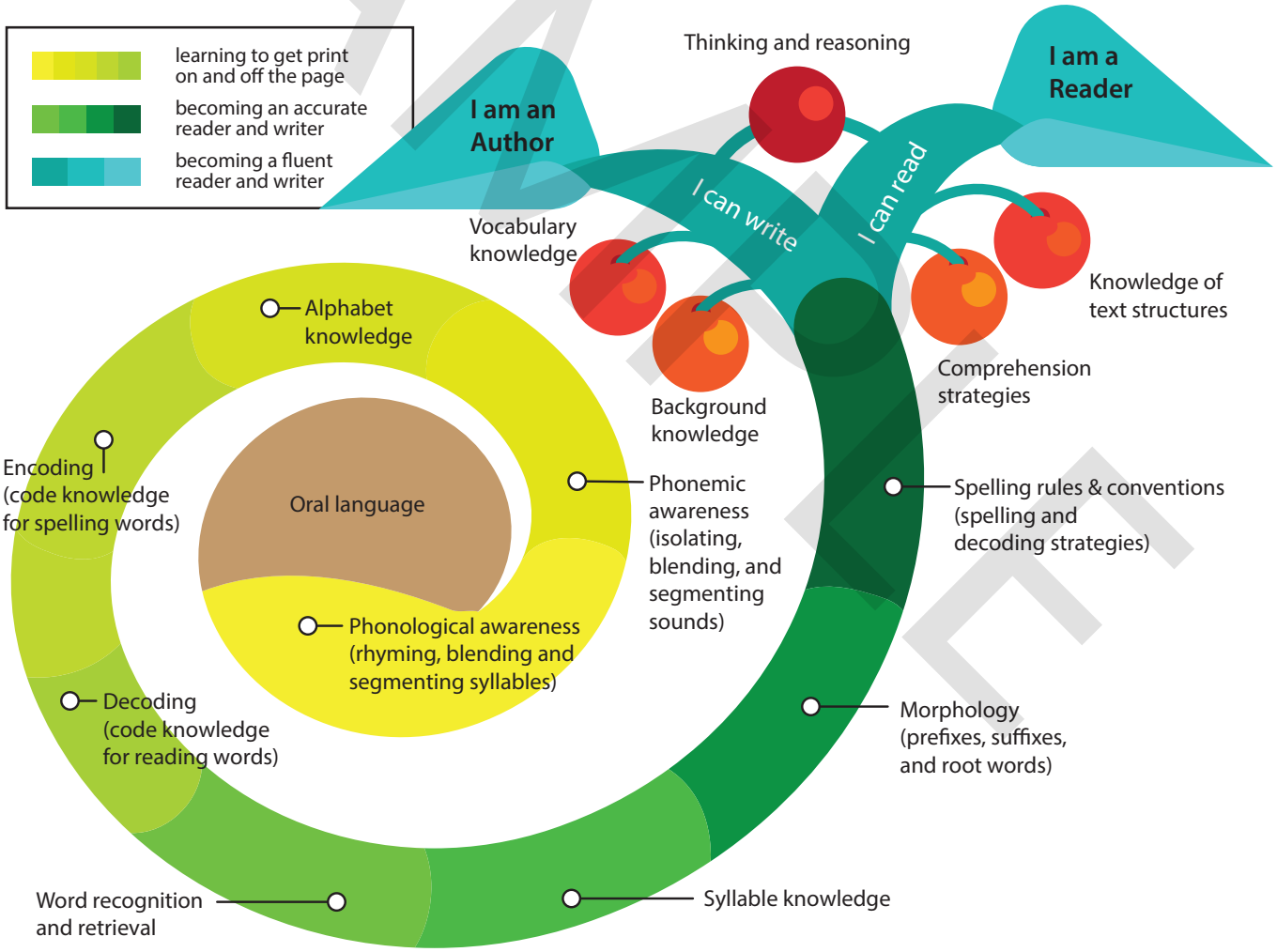
What teachers need to teach

Nurturing the development of reading and writing requires teachers to teach a range of skills and knowledge. This diagram uses the analogy of how a plant grows to explain how literacy develops.

A seed provides the sustenance for plants to germinate — to change from a seed to a seedling. **Oral language is the seed from which literacy grows**.

The stem of a plant provides support for the leaves and fruit and conducts food and water to them to allow them to grow. **The elements of literacy instruction in the stem are the nutrients that support and feed the development of literacy**.

Growing fluent readers and writers is only possible if the seed and every part of the stem are strong. The following pages provide information about each section of this diagram, including an overview of what students need to learn about each one.



Alphabetic code knowledge

The alphabet is the tool we use to translate spoken words into print and print back into the spoken word. The English alphabet uses 26 letters in varying combinations to create a code that represents the sounds in words.

The human brain is not hardwired to learn written language the way it is for spoken language. To learn to use the alphabetic code to **encode** (write) and to **decode** (read), students need to:

- Understand that sounds are written with letters.
- Recognise, name, and print all upper- and lowercase letters of the alphabet.
- Learn that letters on their own and together can represent sounds.
- Understand that most sounds can be written in more than one way.
- Write every sound of English in at least one way.
- Understand that letters and letter patterns (graphemes) can be pronounced in more than one way.
- Pronounce common graphemes (single letters, digraphs, trigraphs, and quadgraphs) in at least one way.

The way we teach alphabet knowledge, handwriting, and the relationships between phonemes and graphemes determines how well students will learn to understand and use the alphabetic code.

Teaching students to write the sounds of English draws on their innate sensitivity to the sounds of spoken language. It allows phonemic awareness to be taught and to develop reciprocally with knowledge of the code. Once students learn to write a sound with a grapheme, it is easier for them to recognise and pronounce the grapheme when they see it in words they are reading.

What students need to learn

Alphabetic code instruction should develop understanding of the diversity of the code.

Consonants and consonant clusters

/b/ ***b****at, ru****bb****er*
/k/ ***c****at, ***k****ing, li****ck****, s****ch****ool, a****cc****ount, ****qu****ay, uni****que***
/d/ ***d****og, mu****dd****le, bang****ed***
/f/ ***f****ish, co****ff****ee, ****ph****oto, lau****gh***
/g/ ***g****o, fo****gg****y, ****gu****ard*
/h/ ***h****ouse, ****wh****o*

[redacted]

Key
* UK, NZ, Australian pronunciation
** US, Canadian pronunciation
*** UK pronunciation only

The code for consonant sounds

A **phoneme** is the smallest unit of sound in the English language. The letter or combination of letters used to represent a phoneme is called a **grapheme**.

There are **24 consonant sounds** in spoken English, and most can be written in two or more different ways. The **/k/** sound, for example, can be written ***c***, ***k***, ***ck***, ***ch***, ***cc***, ***qu***, ***que***. These graphemes represent the **/k/** sound in the words ***c****at,* ***k****ing,* li***ck****,* s***ch****ool,* a***cc****ount,* ***qu****ay,* uni***que***.

Consonant digraphs

A **digraph** is a specific type of grapheme — two letters that represent a single sound. When the sound is a consonant sound, the digraph is known as a **consonant digraph**. For example: ***sh****ip,* ***ch****op,* ba***ck****,* ri***ng****,* ***th****yme,* ***rh****yme,* co***mb****,* bu***tt****er,* hi***ll***.

When two of the same consonants are next to each other in a word, they are usually consonant digraphs — two letters representing one sound (*ru****bb****ing, ho****pp****ing, wi****ll****,* ***off****,* a***cc****ord*). However, in a small number of words each letter represents a different sound (*a****cc****ept,* a***cc****ess*).

Consonant digraphs can occur at the start of words (***sh****ip,* ***ch****ip,* ***kn****ow,* ***wr****ite*), inside words (*mo****th****er, ele****ph****ant, ru****nn****ing, hi****ll****y*) and at the end of words (*fi****sh****,* ea***ch****, bo****th****,* ri***ng***).

Consonant blends

A **blend** is a sequence of adjacent consonant sounds. For example: ***bl****ack,* ***str****ing,* ***cl****ap,* ***scr****ap,* ex***pl****oding,* si***lk****,* be***st****,* fa***ct***.

Blends are always consonant sounds. Double blends represent two sounds. Triple blends represent three sounds. Each sound in a blend is typically written with a single consonant letter, with the exception of ***shr***, ***thr*** and ***squ***.

Blends can occur at the start of words (***st****op*), inside words (*ye****st****erday*), or at the end of words (*che****st***).

Recognising blends and digraphs

When two or three different consonants are next to each other in words, they are most likely to be blends, with each consonant representing a separate sound, unless the second consonant is ***h***. Consonant-***h*** patterns are digraphs — two letters that represent one sound (***sh****op,* ***th****is,* ***ch****ip,* ***ph****oto,* ***wh****en,* lau***gh****,* ***rh****yme*).

With the exception of most doubled letters, the ***h*** digraphs, and a few other consonant digraphs, two (or three) consonant letters next to each other in words are blends, where each letter represents one sound.

Working with blends

Students who have difficulty with phonemic awareness often have trouble hearing (and therefore recording) the sounds in blends. Students can usually read words with blends correctly (the letters make the sounds obvious), but they may misspell words with blends because they cannot distinguish the consecutive consonant sounds and miss one sound, writing ***p****ot* for ***pl****ot*, *che****s*** for *che****st***, ***sp****ash* for ***spl****ash*.

Support activities for these students need to be sound based, not print based. They need to provide practice pronouncing and writing each sound in a blend.

When breaking words into onset and rime, initial blends are pronounced as a chunk of sounds. The onset is the initial consonant sound or sounds, and the rime is the part of the word that begins with the vowel (the part that rhymes), which follows the onset (*p-in, sh-op, pl-ay, spr-out*).

Although students hear initial blends as chunks of sounds when segmenting onset and rime, they still need to learn to segment them into individual sounds for sounding out and spelling words.

Medial and final blends are more difficult to segment and pronounce, and many young students and older students with phonemic awareness difficulties find it hard to hear the sounds in blends in these positions.

Medial blends are sometimes on the end of a root word and before a suffix, and sometimes not (*ex**pl**oding, fai**nt**ing, ha**mp**er, ye**st**erday, acce**pt**able*).

Consonant blends and digraphs																
	b	c	d	f	g	h	k	l	m	n	p	r	s	t	w	z
b	bb							bl				br				
c		cc				ch	ck	cl				cr		ct		
d			dd		dg							dr			dw	
f				ff				fl				fr		ft		
g					gg	gh		gl		gn		gr				
h																

Literacy delays and difficulties

Children who struggle to learn to read, write, and spell might do so for different reasons.

1. The nature of instruction

Students may struggle as a result of the type or quantity of the reading, writing, or spelling instruction they have received. To minimize instruction-based difficulties, literacy skills need to be taught in a way that:

- **Engages the learner**, using multisensory learning experiences,
- **Scaffolds students' learning**, starting with what they already know and can do and developing knowledge and skills from there,
- **Uses a structured and systematic approach** that explicitly teaches phonemic awareness skills and alphabetic code knowledge, and
- **Provides differentiated instruction** to support differing learning needs.

Sometimes a change in the instructional approach is all that is required to address learning difficulties.

2. Dyslexia

Dyslexia is a learning difference that is neurobiological in origin and often causes unexpected difficulties with literacy, particularly inaccurate word recognition, spelling, and decoding. These literacy difficulties typically result from a deficit in **phonological processing** that is unrelated to the student's cognitive skills and persists despite effective classroom instruction.

Specifically, students with dyslexia tend to struggle with:

- **Phonological memory** — sequencing sounds, holding words and sounds in working memory,
- **Phonemic awareness** — blending, segmenting and manipulating sounds,
- Learning to **name letters** and **link them to sounds**,
- **Reading words** in isolation,
- **Decoding** unfamiliar words, and
- **Spelling** words by sounding them out or from word retrieval.

3. Non-specific causes

Some students without dyslexia exhibit similar difficulties as they learn to read, write, and spell. There can be various reasons for their difficulties, but they are not thought to be neurobiological in origin.

ASSESSING STUDENT KNOWLEDGE

This section includes assessment essentials and timelines, yearly achievement expectations, and a full suite of assessment instruments for the first four years of school.

The Code-Ed assessments are also available digitally on the Code-Ed website. The reproducible pages may be printed or photocopied by the owner of this book for classroom use only.

Assessment essentials

Assessment is critical for understanding students' strengths and needs, informing instruction, tracking achievement, and for measuring the impact of instruction on student outcomes. Choosing assessment tools wisely means less assessment for more information.

Do less and learn more!

This section provides assessments that can be used with the whole class to identify class-wide instructional needs (Tier 1) as well as assessments that identify the needs of students who do not make the same progress as their peers (Tiers 2 and 3). The assessments can be used both formatively and summatively for students in Years 1 to 4, and for students beyond year 4 who have gaps in literacy knowledge and skills.

- **Formative assessment** is used before instruction to show the skills and knowledge students already have and to determine areas of need. Formative assessment drives instruction to ensure nothing is left to chance.
- **Summative assessment** is used after instruction to give a global picture of progress and achievement and to provide reassurance that students are achieving the knowledge they need to progress to the next stage of their learning. Summative assessment can also be used to evaluate efficacy by measuring the impact of instruction on student outcomes.

Formative assessment

The Code-Ed assessments can be used to drive instruction in different ways.

- **To find out what needs to be taught to the whole class**
  For example: Most students could not use possessive apostrophes correctly — this will need to be taught to all students.
- **To identify students who need extra help or extension**
  For example: Some students did poorly in all assessments, and others did extremely well. These students may need further assessment to understand their specific needs and opportunities for additional support or extension.
- **To identify gaps in student knowledge**
  For example: Some students did well in some areas but have knowledge gaps in other areas. They may need extra instruction in these specific areas individually or in small groups.

The **assessment timelines** on pages 114–117 provide guidelines for using the Code-Ed assessments at different times during each year level. Some assessments are indicated for all students. Others are only for students who demonstrate knowledge gaps. These students will need either further or ongoing assessment to ensure they achieve mastery.

Using this **test, teach, and track approach** means that students' progress and achievement is constantly monitored, and instruction is tailored to meet identified needs.

Summative assessment

The assessments in this book can also be used to analyse the effect of instruction students receive between a pre-test and a post-test. The **Effect Size Shift** (ESS) measures the impact of instruction on student outcomes.

Some broad guidelines for understanding Effect Size Shifts

0.15–0.45	**small to medium impact** up to two times the normal rate of learning
0.45–0.75	**medium to large impact** two to three times the normal rate of learning
0.75+	**large to very large impact** three-plus times the normal rate of learning

The Effect Size Shift can be easily calculated for any assessment with pre-test and post-test data, using Excel or another spreadsheet program.

Working out the Effect Size Shift

1. Enter students' pre- and post-test scores side by side in a spreadsheet. Only include results for students who have completed both tests.
2. Use the AVERAGE formula to calculate the means of the pre-test and post-test results.
3. Subtract the pre-test mean from the post-test mean to find the difference.
4. Use the STDEV formula to calculate the standard deviations for the pre-test and post-test scores.
5. Use the AVERAGE formula to calculate the mean of the two standard deviations..
6. Divide the total from step 3 (the difference between the two means) by the total from step 5 (the mean standard deviation). This number is the Effect Size Shift.

$$\text{ESS} = \frac{\text{Post-test mean} - \text{Pre-test mean}}{\text{Mean standard deviation}}$$

Assessment timelines

Test, teach, and track

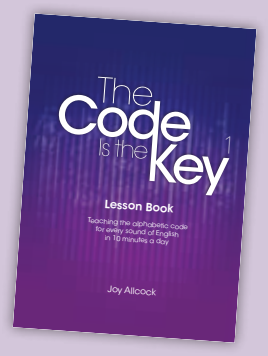
Year 1 School Entry/ Start of Kindergarten

All students

- Foundations for literacy checklist (A1)*
- Grapheme knowledge (A3)

Some students

- Phonological and phonemic awareness (A2) if indicated from checklist
- Letter formation (A4) for students who are writing letters



*Use checklist results to target teaching for specific students.

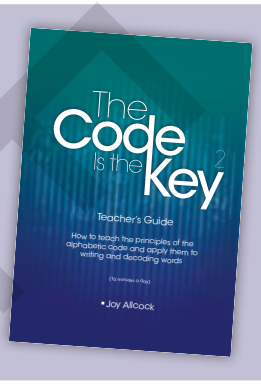
Start of Year 2/Grade 1

All students

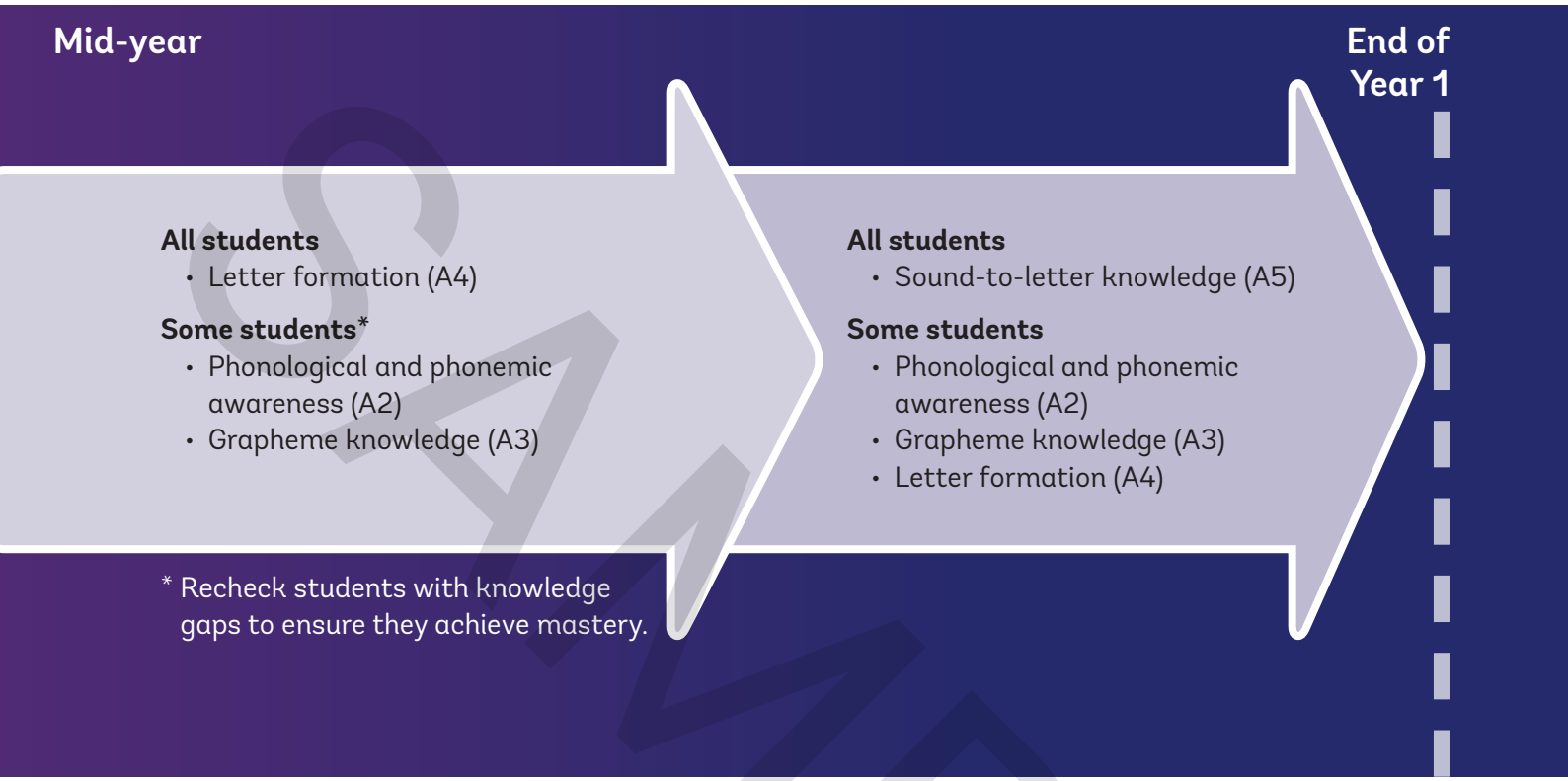
- Sound-to-letter knowledge (A5)*
- Pseudoword spelling A (A6)

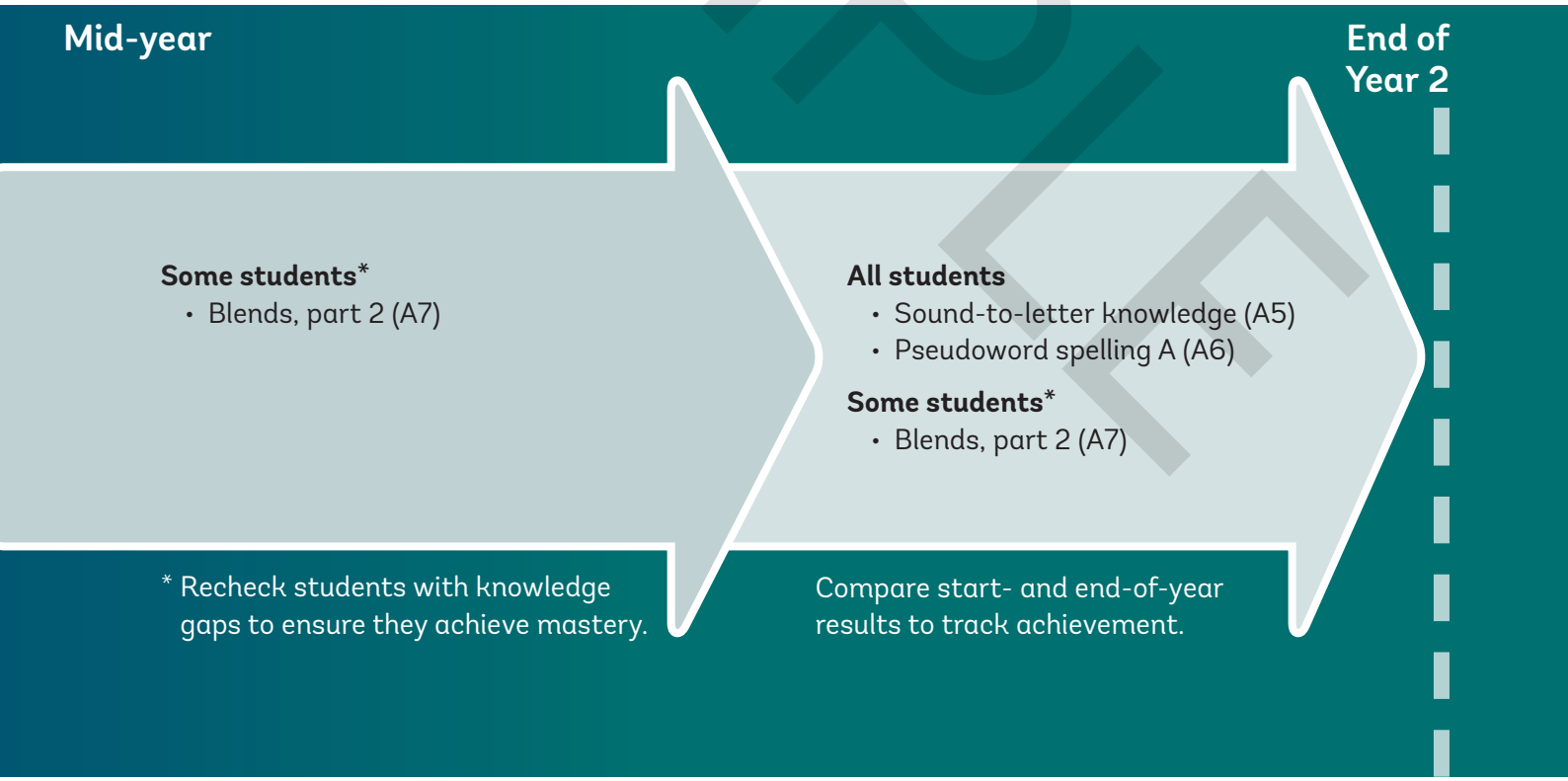
Some students

- Phonological and phonemic awareness (A2) and Letter formation (A4) for students being tracked from Year 1
- Blends, part 1 (A7) for students identified from pseudoword assessment



*Use end of Year 1 sound-to-letter assessment results if available, instead of retesting.





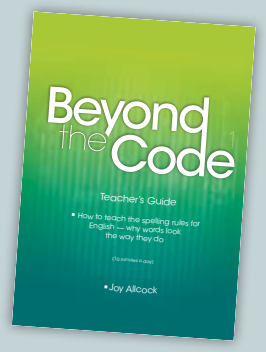
Assessment timelines

Test, teach, and track

Start of Year 3/Grade 2

All students

- Pseudoword spelling B (A6)
- Short and long vowel discrimination (A8)

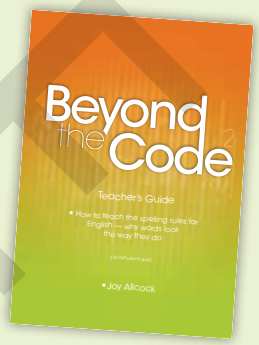


For students with literacy delays or difficulties, see the suggestions on pages 101–103.

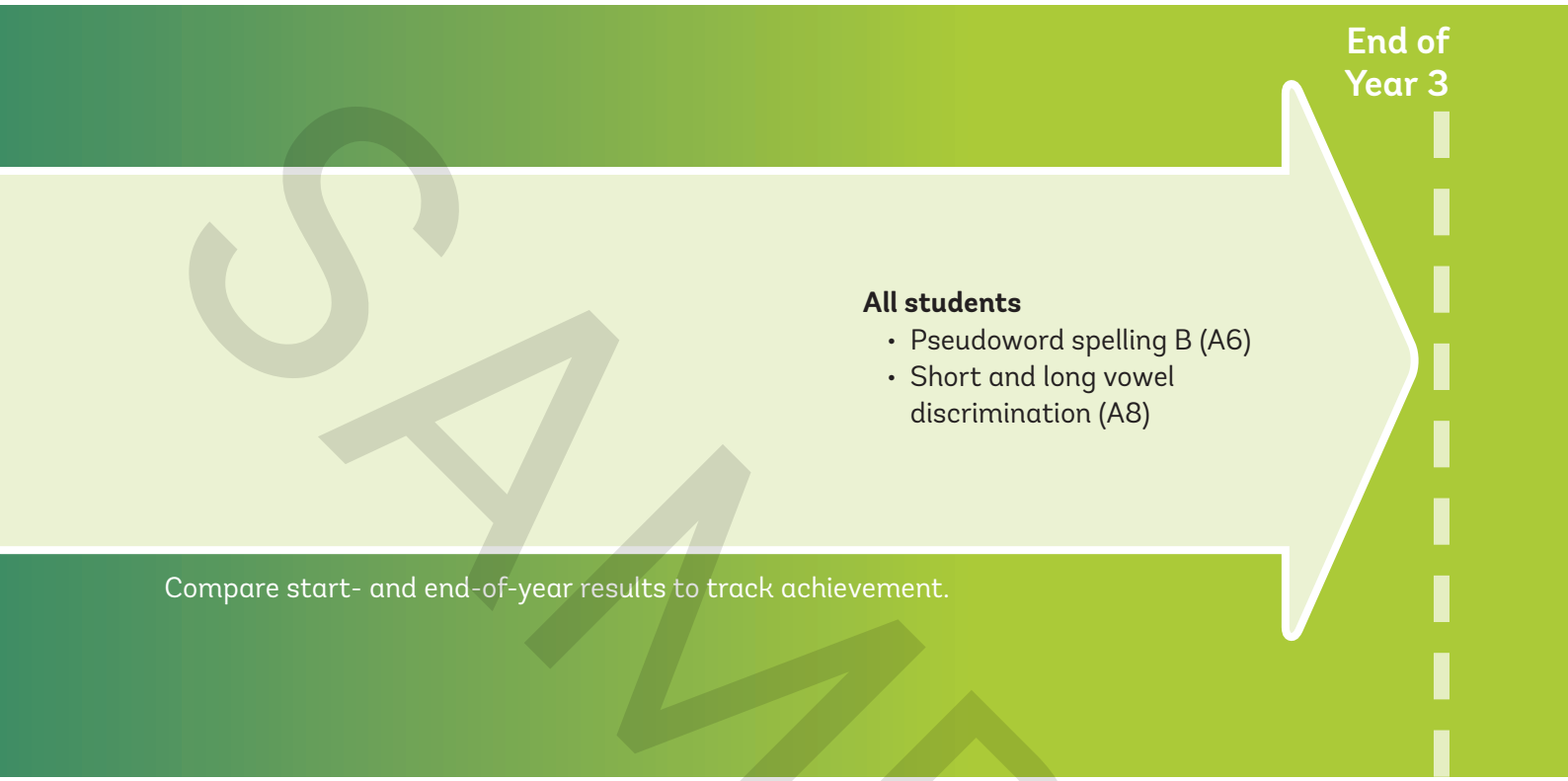
Start of Year 4/Grade 3

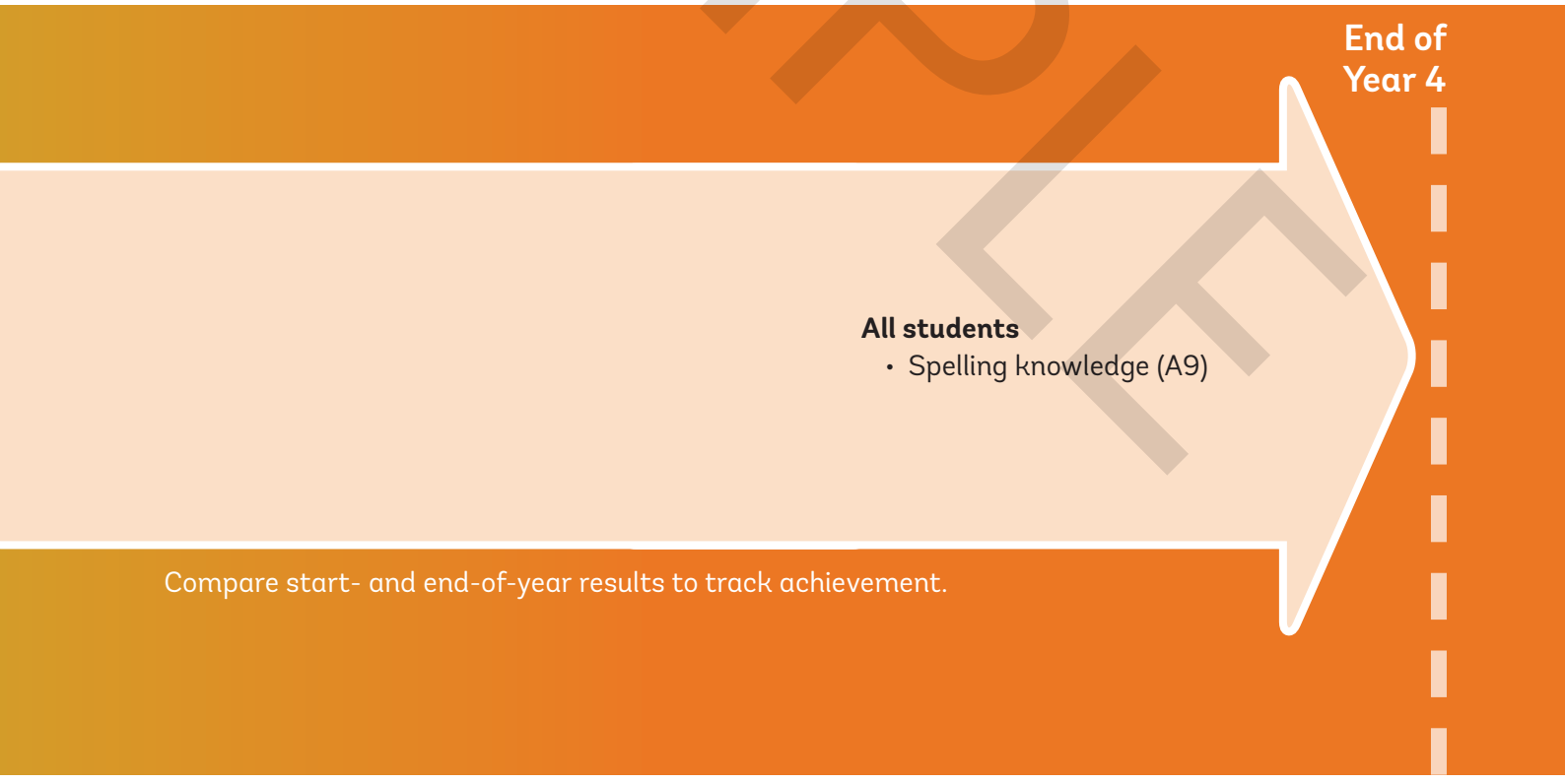
All students

- Spelling knowledge (A9)



For students with literacy delays or difficulties, see the suggestions on pages 101–103.





assessment 5

Sound-to-letter knowledge

YOU WILL NEED
- A copy of page 150 for each student

Purpose

Being able to hear sounds in words and to write any sound one way provides beginning writers with the tools to sound out and write any word they can say. Sound-letter knowledge is the foundation for learning to write, and it supports students to decode words by developing phoneme-grapheme relationships. Students need to learn to write every sound of English as quickly as possible when they start school. **This sound-to-letter assessment shows which sounds students can write and which ones need further instruction and practice.**

Administration

*When pronouncing a phoneme written between two slashes, such as **/p/**, be sure to pronounce the individual sound, not the name of the letter. Short vowels are written **/a/**, and long vowels are written **/ā/**.*

This assessment can be given individually or to a group of students at the same time. Start by saying, Listen to the sounds I say, and write them the way you think they look in words. Just write each sound, not the words.

Demonstrate this by saying, If I said, 'Can you write the **/p/** sound you can hear in *peg*, *puppy* and *open*, how would you write it?' Yes, with a letter ***p***. Write the letter ***p*** on the board.

Then say, Sometimes we can write the same sound in different ways. I want you to choose just one way to write each sound. Sometimes you might need to write the sound with more than one letter. Write...

1. The **/s/** sound in *soft* and *sock* — **/s/**
2. The **/w/** sound in *wet* and *we* — **/w/**
3. The **/t/** sound in *toe* and *top* — **/t/**
4. The **/k/ /s/** sounds in *box* and *fox* — **/k/ /s/**
5. The **/z/** sound in *zip* and *zoo* — **/z/**
6. The **/l/** sound in *leg* and *lip* — **/l/**
7. The **/k/ /w/** sounds in *quick* and *queen* — **/k/ /w/**
8. The **/k/** sound in *kite* or *cat* — **/k/**
9. The **/d/** sound in *dog* and *dig* — **/d/**
10. The **/y/** sound in *yellow* and *yes* — **/y/**

45. (US/Canada) The **/aw/** sound in *saw* and *jaw* — **/aw/**

45. (UK) The **/ure/** sound in *pure* and *cure* — **/ure/**

Using the answer key, mark each sound that is written correctly. The answer key lists the most common ways to write each sound, but there are others. If students use other appropriate options, mark them correct.

Take note of any patterns that emerge, for example: vowels incorrect, consonant sounds commonly unknown across the class, sounds written with digraphs that are unknown.

Instruction and achievement guidelines

The sounds commonly written with single letters (1–30) are easiest for students to learn. The other sounds are usually written with digraphs or trigraphs (31–45) and take longer for students to learn. Look for gaps in knowledge to provide explicit instruction targeting the sounds and spelling patterns that are not yet known — whole-class instruction for sounds missed by much of the class and small-group or one-on-one lessons to address other learning gaps.

Stanine scores for this assessment provide guidelines for achievement. A stanine score between 4 and 6 is considered average, 7–9 is above average, and 1–3 is below average.

End of Year 1/Kindergarten		End of Year 2/Grade 1	
Stanine	Score	Stanine	Score
1	0	1	0-20
2	1-21	2	21-29
3	22-26	3	30-33
4	27-29	4	34-36
5	30-33	5	37-39
6	34-37	6	40-41
7	38-39	7	42
8	40-41	8	43
9	42-44	9	44

Answer key

1. *s*
2. *w, wh*
3. *t*
4. *x, ks, cks*
5. *z*
6. *l*
7. *q, qu*
8. *c, k*
9. *d*
10. *y*

45. (US/Canada) *au, aw*; (UK) *ure*

▼ ASSESSMENT 5 — SOUND-TO-LETTER KNOWLEDGE

NAME		DATE
1.	16.	31.
2.	17.	32.
3.	18.	33.
4.	19.	34.
5.	20.	35.
6.	21.	36.
7.	22.	37.
8.	23.	38.
9.	24.	39.
10.	25.	40.
11.	26.	41.
12.	27.	42.
13.	28.	43.
14.	29.	44.
15.	30.	45.
COMMENTS		**TOTAL**

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EVALUATING EVIDENCE

This section presents the research foundations behind the speech-to-sounds-to-print approach, including a summary of the *Shine* Literacy Project and evidence of the reliability, validity, and significance of the Code-Ed assessments.

Research foundations

The Code Is the Key and *Beyond the Code* are resources that link current research to best practice for early literacy instruction. They utilise a speech-to-sounds-to-print approach for teaching young students to understand how the alphabetic code works, along with strategies for using the code to spell and read words correctly.

This speech-to-sounds-to-print approach was the focus of a two-year research study followed by a three-year initiative, which together provided irrefutable evidence of its effectiveness for teaching young children across all socioeconomic levels, genders, and ethnicities to write and read. What follows is the story of the *Shine* Literacy Project and Initiative — how they came about and their impact on more than 5,000 children over a five-year period.

Background

In classrooms around the world, many children struggle when learning to read and write. Unfortunately, children from low socioeconomic communities and those from ethnic minorities are over-represented in this group. Children who start school with the most literacy knowledge tend to do better and continue to do better than their peers who start with less knowledge. This is often described as the Matthew Effect. It was concern about this issue that led to the *Shine* Literacy Project.

Between 2010 and 2012, an action research project was run at Titahi Bay School in Porirua City, New Zealand. Teachers were concerned that many students' writing achievement did not match their much greater oral language skills. Their performance did not match their potential. The project aimed to raise writing achievement using a speech-to-sounds-to-print approach for instruction in the first three years of school. This change in instruction raised writing and reading achievement by 30%.

The *Shine* Literacy Project (2014–2016)

After reading the results from Titahi Bay School, Professor James Chapman from the Institute of Education, Massey University, designed a more robust two-year research project for a larger group of schools. The research project was supported by a number of people and organisations who attended the *Shine* Education Summit in Porirua City in 2013. Funds were raised to allow the project to proceed and to support teachers in the *Shine* schools over a five-year period. The research project was called The *Shine* Literacy Project.

The *Shine* Literacy Project ran from May 2014 to July 2016. Thirty-two schools from Porirua City and the greater Wellington area took part — 18 trial schools and 15 comparison schools comprising 259 children from low and high socioeconomic communities. There were 112 boys and 147 girls from 28 different ethnic backgrounds.

Teachers in the trial schools were offered a series of professional development workshops and were provided with a teaching resource written for the project

called *Sounds Like Fun*, to ensure they used the speech-to-sounds-to-print approach consistently. After the research was concluded, *Sounds Like Fun* was revised and updated to become *The Code Is the Key*.

Assessments and data

Students' literacy knowledge and skills were assessed at school entry, after 16 weeks at school, after one year at school, after 18 months at school, and after two years at school.

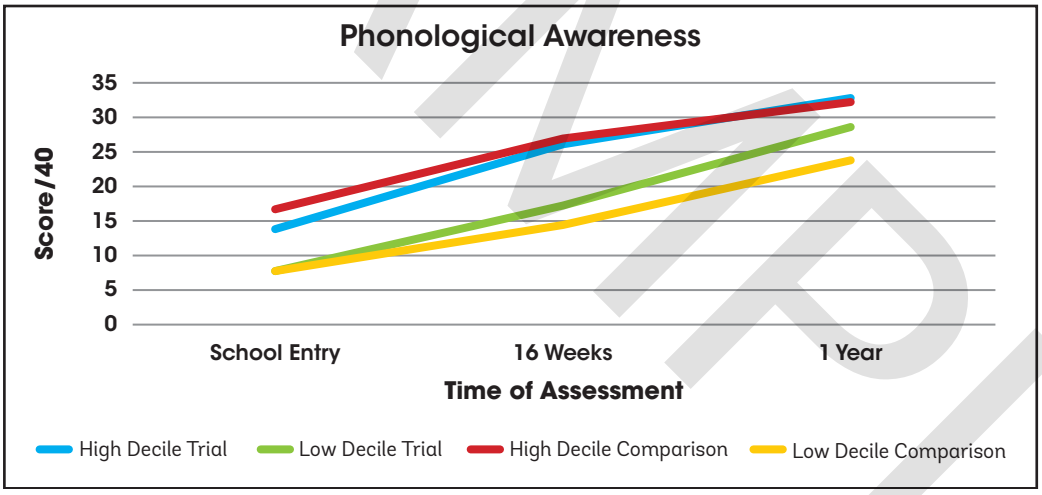
At school entry, students in the comparison group had significantly higher scores for most variables assessed, compared to the trial group. However, after one year at school, the trial group had caught up, and in many areas, significantly outperformed the comparison group.

Because students from low decile schools typically fall further behind their high decile peers, the researchers were most interested in the achievement trajectories for students from these schools. Comments about the data below focus on the achievement of students from these schools.

Socioeconomic status is described in deciles with decile 1 being the lowest and decile 10 being the highest.

Phonological awareness results after one year

SPAT: Sutherland Phonological Awareness Test—Year 1 Students by Decile Groups



This graph illustrates progress with phonological awareness skills. It shows the difference in progress made by students from high and low decile schools and by trial and comparison students.

By comparing the green and yellow lines, the data show that students from the low decile trial schools made faster progress than their peers in the low decile comparison schools. In just one year of the speech-to-sounds-to-print approach, they were beginning to catch up with students from the high decile schools.

Reading results after 18 months and 24 months

When they started school, the two low decile groups had similar school entry profiles. After 18 months at school, on all measures of reading (comprehension, accuracy, and word recognition), the trial students were, on average, between three and six months ahead of their comparison peers and, on average, between three and five months above their chronological age. The comparison students were, on average, at or up to three months below their chronological age.

Eighteen months into the project, all comparison schools were offered the opportunity to adopt the speech-to-sounds-to-print approach. Just six months after adopting the trial instruction, students in the low decile comparison schools had begun to catch up and to close the gap with their peers and were reading, on average, at or above their chronological age.

Research findings

At the end of this two-year research project, Professor Chapman stated in his final report:

> [T]he data from this project indicate that the *Sounds Like Fun* approach is related to impressive gains made by the trial group for key literacy outcome variables including reading comprehension, reading accuracy, word identification and spelling. In addition, Māori, Pasifika and ESOL children made important gains. Further, low decile children showed significant improvement on these key literacy outcome variables. Additional evidence in support of the effectiveness of the SLF approach is shown in the comparison children starting to close the gap with the trial children following the introduction of SLF in those schools.
>
> The *Sounds Like Fun* approach is based on solid and contemporary research and has many features that are superior to the "standard" approach to literacy instruction adopted by most schools in New Zealand. **Because the evidence and indications from this study point to improved literacy learning outcomes, schools would do well to consider replacing or supplementing their current approach to literacy instruction with the *Sounds Like Fun* approach**.

In brief, the *Shine* Literacy Project showed that even if children come to school without foundational literacy skills and knowledge in place, it is possible to accelerate progress by using instructional strategies that build on the knowledge and skills they do have.

School entry knowledge, socioeconomic status, ethnicity, and gender do not need to determine literacy outcomes. **Evidence-based instruction can level the playing field for all children so they achieve to their potential.**

Reliability, validity, and significance

Many of the assessments in this book were administered to Year 1 to 4 students in schools representative of the multi-ethnic and multi-lingual makeup of classrooms in New Zealand, including English language learners and students from high and low socioeconomic communities. The assessments were administered either once or twice a year, marked by classroom teachers, and the data analysed by Professor James Chapman of Massey University for reliability, validity, and significance.

Reliability

The measure of reliability used for all assessments was Cronbach's alpha, a measure of internal consistency. **A reliability coefficient of .7 or higher** is considered acceptable in most social science research situations and indicates results that are precise, reproducible, and consistent from one testing occasion to another.

Validity

A valid assessment can say that it measures what it claims to measure. Validity results are presented using the Pearson's *r* correlation coefficient, which was used to measure the strength of the association between two assessment instruments. **Positive correlations range from .1 to 1.0**, and negative correlations range from -.1 to -1.0. The closer the figure is to 1.0, the stronger the association and therefore the validity.

	Pearson's, *r*	
Strength of Association	**Positive**	**Negative**
Small	.1 to .3	-.1 to -.3
Medium	.3 to .5	-.3 to -.5
Large	.5 to 1.0	-.5 to -1.0

Significance

The statistical significance of these correlations is measured using *p*-value. The *p*-value is a measure that determines whether the outcome is the result of chance. **A *p*-value of .05 or less is statistically significant** — unlikely to be due to chance. A *p*-value of .05 means that there is a 95% greater chance that you would find similar results when repeating the assessment.

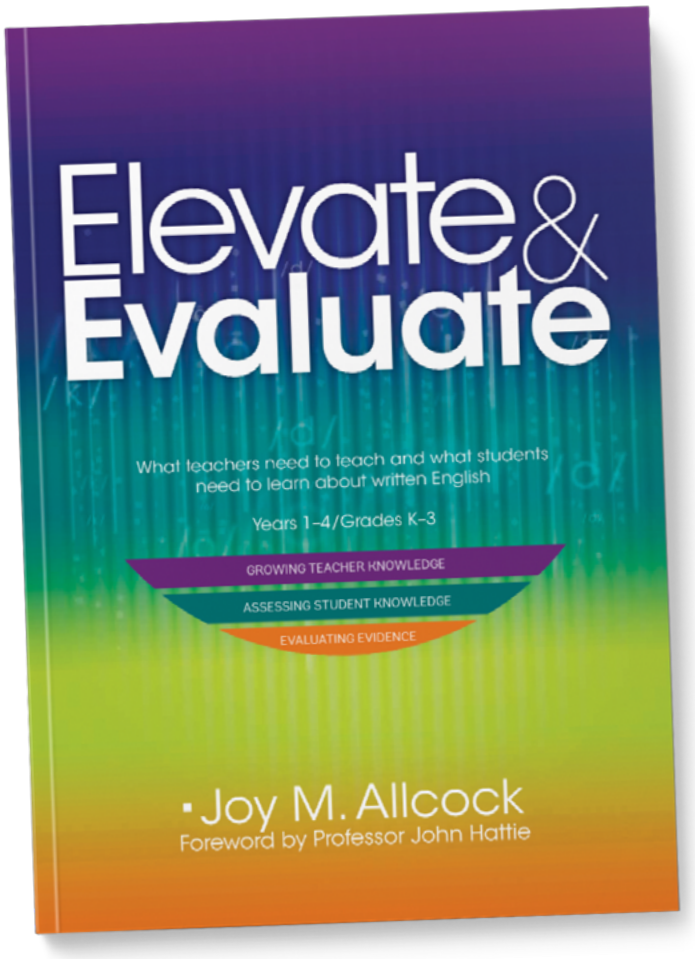
Expectations for achievement are presented where appropriate using stanine scores. **A person with a stanine score of 9 is in the top 4% of scorers**, while a person with a score of 1 is in the bottom 4%. These types of scores make it possible to tell if a student's score is below or above the mean (a stanine score of 5). Where they are available, stanine scores are included with each assessment.

After analysis of the data, students in this sample received direct instruction to address learning gaps. Their progress was measured using effect size, which measures the amount of improvement made by students over a period of time. **Effect sizes of .4 or higher show a significant impact on the rate of learning**.

	Reliability Cronbach's alpha	**Validity** Pearson's *r*	**Significance** *p*-value	**Effect size**
Target values:	.7 or higher	between .3 and 1.0	.05 or less	.4 or higher
Foundations for literacy checklist (A1)	.86 N=322	No correlation data available	N/A	N/A
Grapheme knowledge (A3) — lowercase letter names Year 1 (Grade K) Time 1/Time 2	.96/.96 N=167	**Correlations with** Burt Word Reading Test at: 1 year .551 18 months .523 2 years .521 Neale Reading Comprehension at: 18 months .501 2 years .472 Neale Reading Accuracy at: 18 months .502 2 years .485 WRAT Spelling at: 18 months .440 N=186	All <.001	1.21
Grapheme knowledge (A3) — lowercase letter sounds Year 1 (Grade K) Time 1/Time 2	.96/.94 N=167	**Correlations with** Burt Word Reading Test at: 1 year .492 18 months .447 2 years .454 Neale Reading Comprehension at: 18 months .438 2 years .419 Neale Reading Accuracy at: 18 months .460 2 years .434 WRAT Spelling at: 18 months .412 N=186	All <.001	1.65

	Reliability Cronbach's alpha	**Validity** Pearson's *r*	**Significance** *p*-value	**Effect size**
Target values:	.7 or higher	between .3 and 1.0	.05 or less	.4 or higher
Sound-to-letter knowledge (A5)		**Correlations with**		
Year 1 (Grade K) Time 1/Time 2	.953/.952 N=117	Burt Word Reading Test at: 1 year .721 18 months .703 2 years .662 Neale Reading Comprehension at: 18 months .669 2 years .654 Neale Reading Accuracy at: 18 months .697 2 years .669 WRAT Spelling at: 18 months .647 N=187		.85
Year 2 (Grade 1) Time 1/Time 2	.951/.936 N=384		All <.001	.65
Pseudoword spelling (A6)		Correlations between test items are between .367 and .985.		
Year 2 (Grade 1) Time 1/Time 2	.85/.80 N=124	**Correlations with** Hodder Group Reading: .503 Hodder Diagnostic Spelling: .394		.60
Year 3 (Grade 2) Time 1/Time 2	.87/.86 N=206	N=166	All <.001	.60
Short and long vowel discrimination (A8) Year 3 (Grade 2)	.88 N=234	No correlation data available	N/A	N/A
Spelling knowledge (A9) Year 4 (Grade 3)	.74 N=210	No correlation data available	N/A	N/A

Note: Reliability and validity data were not yet available for the phonological and phonemic awareness (A2) and blends (A7) assessments when this edition went to print. The letter formation (A4), spelling analysis (A10), and decoding analysis (A11) assessments do not generate summative scores for the analysis of reliability and validity.



This **professional resource** supports teachers with the knowledge and tools they need to **elevate literacy instruction** and **evaluate student achievement**.

To learn more about *Elevate & Evaluate* please visit

Code-Ed.co.nz