

Teaching language and literacy in Grade R: A focus on letters and sounds within a story-based programme

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Introduction

The low early grade reading levels of South African children are well documented (Van Staden & Gustafsson, 2022). Recent PIRLS results highlight challenges with reading comprehension at Grade 4 level, but studies also show that many children are not acquiring alphabet knowledge earlier in their reading trajectory, and that these children are more likely to struggle with reading fluency and comprehension in later years (Wills, Ardington & Sebaeng, 2022). But why is learning about letters and the sounds they make proving to be such a difficult task for the majority of children in South Africa? When is the optimal time to be learning about letters and would it make a difference if alphabet knowledge had a stronger focus in Grade R?

Local and international research is clear: letter-sound knowledge is critical for learning to read and write in an alphabetic language (Snow, Burns & Griffin, 1998; Castles, Rastle & Nation, 2018). What remains controversial is *when* and *how* best to support children to learn about letters and the sounds they make.

Drawing on research and best practice for teaching young children, this paper highlights the key principles that underpinned the development of materials to teach letter-sound knowledge in Grade R. These materials were developed as part of a story-based Home Language programme for the Gauteng Grade R Language Improvement Project, a provincial teacher training programme targeting all Grade R teachers in public ordinary schools, special needs schools and registered ECD centres in Gauteng.

Current realities and relevant research

To become skilled readers and writers, children need a strong foundation of oral language skills and they need to understand the alphabetic principle – that there is a link between the letters they see on a page (visual symbols of the writing system) and the sounds they hear in words. Byrne (1998) has proposed that developing an understanding of the link between sounds of speech (phonemes) and signs of print (letters) is the key task faced by the beginning reader and writer. Although this is obvious to adult readers, this is a big step for young learners (Bialystok, 1995), particularly as they must first learn to pay attention to different sounds in words. The awareness of the sounds in a word, rather than the

meaning of the word, is called phonological awareness.¹ Phonological awareness activities do not require a focus on letters – most can be done with your eyes closed. Phonological awareness is not the same as phonics, which is about knowing how specific written letters relate to specific spoken sounds.²

Phonological awareness and letter-sound knowledge are among the best predictors that children will learn to read successfully (Juel, 1988; Adams, 1990). If children are able to hear individual sounds in words, have a solid base of letter-sound knowledge and are provided with meaningful opportunities to read and write, they have the tools needed to gain vital print experience and set up a self-teaching system (Share, 1995). The more they read, the more they can infer new letter-sound relationships and obtain orthographic information about words (information about the patterns of letters that make up words) which is the basis for visual word recognition. In turn, print experience leads to increasing fluency and further strengthens the oral language skills that are so vital for comprehension (Van Bergen et al., 2018).

Research has shown that children from high poverty contexts generally begin school with less well-developed letter knowledge and phonological awareness than their middle-class peers and that these differences contribute to differences in early word reading skills (Stuart, 1990; Bowey, 1995; Duncan and Seymour, 2000).

- 1 Phonological awareness includes awareness of rhyme (cat-mat-fat), syllables (te-le-phone) and phonemes (c-a-t). Awareness of sounds at the phoneme level is most strongly predictive of word reading and writing. Phonemic awareness includes recognising beginning, middle and end sounds in words ("run" starts with /r/, ends with /n/ and the sound in the middle is /u/), blending sounds to make a word (/c/ /a/ /t/ makes cat), segmenting words into sounds (bus = /b/ /u/ /s/), deleting ("mice" without /m/ = ice) and substituting sounds in words (say "pot", then put /h/ instead of /p/ = hot).
- 2 Letter-sound knowledge is sometimes referred to as grapheme-phoneme knowledge or alphabetic knowledge (although alphabetic knowledge could mean knowledge of either letter sounds or letter names). The alphabet is the "code" for written language and when children understand the alphabetic principle and have learnt the relationships between letters and sounds, we might say that they have mastered the code: "All writing systems are a kind of code for spoken language, and learning to read requires children to crack how the code works for their language" (Castle et al., 2018, p. 8).

Studies in South Africa have confirmed these findings. Small-scale studies showing that many children in under-resourced schools enter Grade 1 with low levels of alphabetic knowledge and a limited ability to hear beginning sounds in words (Nadler-Nir, 1997; O'Carroll, 2006; 2011) have been confirmed by large studies across language groups (Piper, 2009; Wills, Ardington & Sebaeng, 2022).

The table below shows children's ability to identify initial sounds in words at the beginning of Grade 1 (data from Wills, Ardington & Sebaeng, 2022, p. 44).³ The low percentage scores are of concern given that learning to identify initial sounds in words is part of the Grade R curriculum.

Ability to identify initial sounds of words (phonemic awareness)	Eastern Cape	Mpumalanga
% of learners scoring zero (i.e. 0 of 3 items correct)	49%	68%
Average percentage score (out of 3 items)	37%	18%
% of learners answering all 3 oral items correctly	23%	7%

Longitudinal data allows us to track the performance of these learners as they begin reading: "Learners in the Eastern Cape sample who can identify all three initial sounds at the beginning of Grade 1 have an oral reading fluency score at the end of Grade 3 that is 15 words higher than those who were unable to identify any of the initial sounds" (Wills, Ardington & Sebaeng, 2022, p. 45).

Schaeffer and Kotze (2019) also report links between Grade 1 phoneme awareness and word reading. They found that initial phoneme isolation at the start of Grade 1 was a significant predictor of word reading in L1 isiZulu and Siswati and was a good predictor of English second language phoneme awareness, letter knowledge, word-reading and spelling.

If we shift our focus to letter-sound knowledge, a similar pattern of low performance is evident at the start of Grade 1. Figures 1 and 2 show that 51% of learners from an Eastern Cape sample and 42% of learners from a North West sample had no alphabetic knowledge at the start of Grade One (from Wills, Ardington & Sebaeng, 2022, p. 46). At the end of Grade 1, only a quarter of learners in these samples achieved the benchmark of recognising 40 letters correctly per minute (Wills, Ardington, Pretorius, Poole, Ramagoshi & Sebaeng, 2022; Ardington et al., 2020).

³ The fieldworker says a word and asks the child what sound the word begins with (kodwa, misa, and vuka in the Eastern Cape; busa, gogo, and wena in Mpumalanga).

Figure 1: Letter-sound knowledge in Grade 1 and 2, Eastern Cape sample (isiXhosa, a Nguni language)

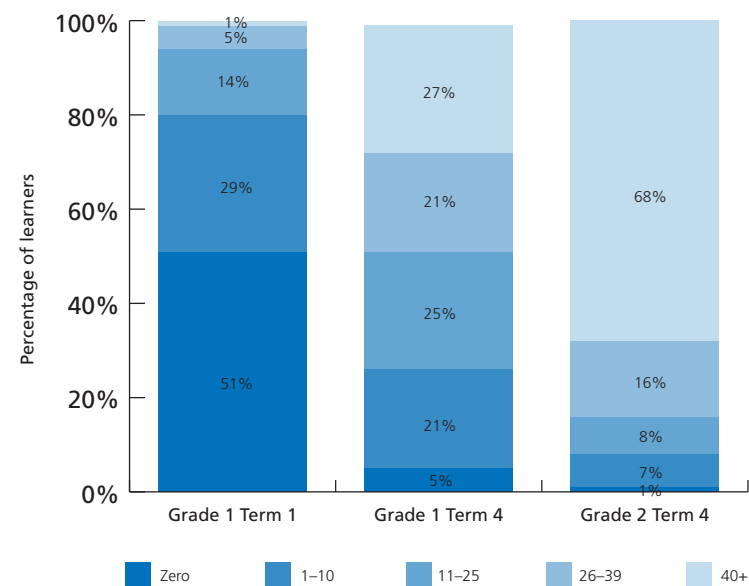
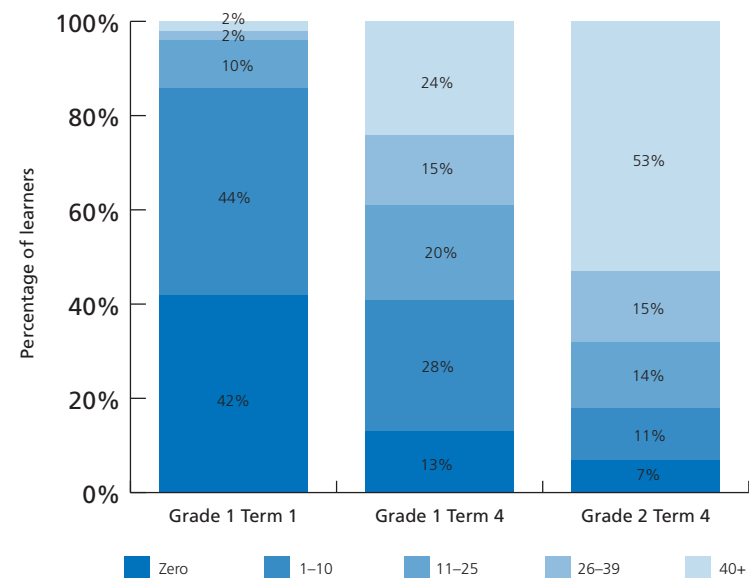


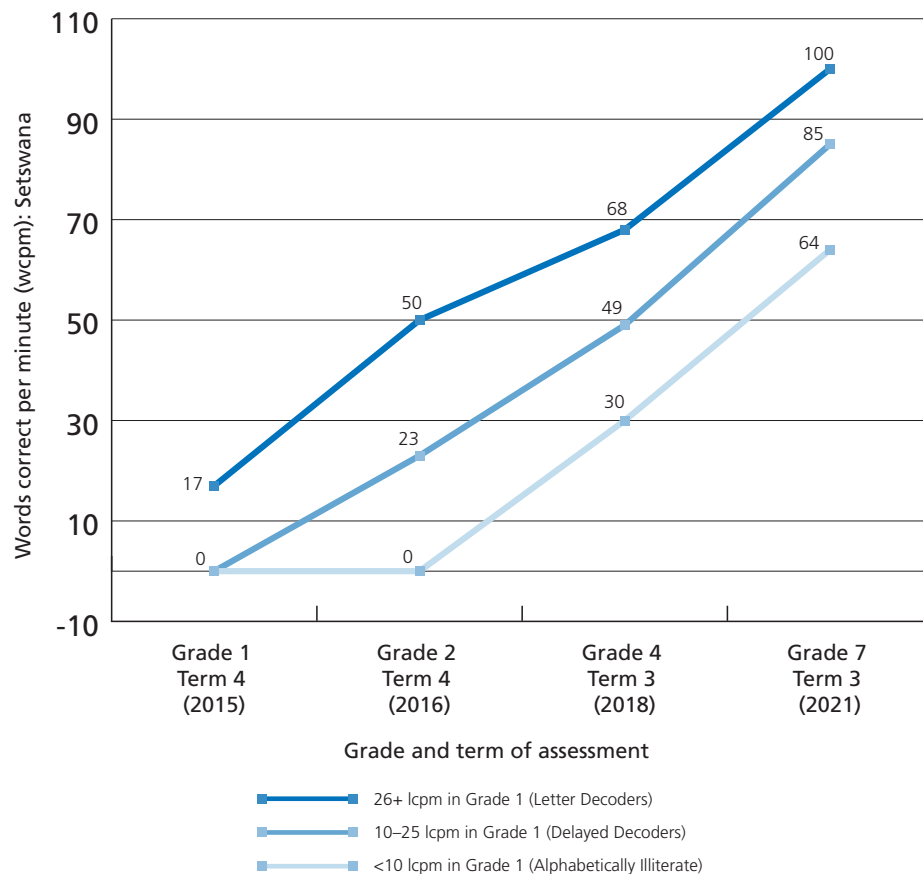
Figure 2: Letter-sound knowledge in Grade 1 and 2, North West sample (Setswana, a Sesotho-Setswana language)



Pretorius and Spaull (2022) created three groups of learners based on their scores on a letter recognition task at the end of Grade 1: *Letter Decoders* can accurately sound out 26+ letters in one minute (lcpm), *Delayed Decoders* have emerging alphabetic knowledge (between 10–25 lcpm), and *Alphabetically Illiterate* learners know fewer than 10 letters of the alphabet (< 10 lcpm).

Figure 3 shows the word reading trajectories of children grouped according to the number of letters they could name correctly at the end of Grade 1 (reported in Wills, Ardington & Sebaeng, 2022, p. 55 and adapted by Pretorius & Spaull, 2022, p. 10).

Figure 3: Reading trajectories for three groups of learners based on Grade 1 letter-sound knowledge (Early Grade Reading Study I)



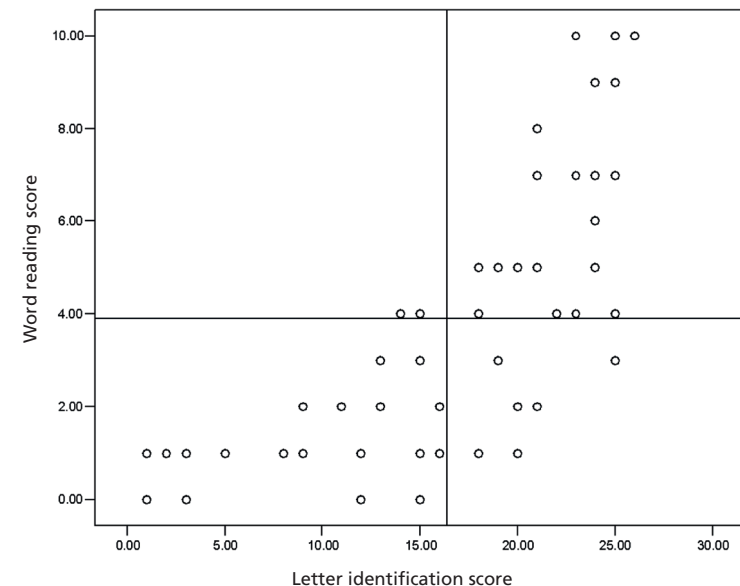
It is to be expected that children who are “alphabetically illiterate” at the end of Grade 1 (< 10 letters correct per minute) have the most difficulty reading words and Pretorius and Spaull (2022) warn that, “Children who do not master the code in Grade 1 lag behind their peers for the remainder of their primary schooling careers” (p. 12).

It is worth noting that the learners who have some letter knowledge at the end of Grade 1 (10–25 lcpm) are still unable to read any words correctly in a minute, and their word reading fluency scores never catch up to those who achieved scores of 26+ lcpm at the end of Grade 1. At the end of Grade 4, their word reading fluency is 49 wcpm, well below the Sesotho-Setswana benchmark of 60 wcpm for the end of Grade 3 (Wills, Ardington, Pretorius, Poole, Ramagoshi & Sebaeng, 2022).

Given the different word-learning trajectories of these three groups of children, it seems critical to understand what distinguished the children classified as *Letter Decoders*. They either learnt about letters more quickly than their peers during the course of Grade 1, or may have started Grade 1 with some knowledge of letters, giving them a head start.

Assessments of word reading in mid-Grade 1 suggest that learners are at an advantage if they either start school with some letter-knowledge or master letter-sound relationships early in the year. The following scatterplot shows that after only two terms in Grade One, learners with above average word reading scores all had average or above average letter-sound knowledge (O’Carroll, 2006).

Figure 4: Scatterplot of letter identification and word reading scores



The children who achieved above average letter knowledge scores were either more efficient at acquiring letter-sound knowledge in the first two terms of Grade One, or they started Grade One with a base of letter-sound knowledge. Research on developmental change helps to explain why having a base of letter knowledge at the start of Grade One gives children an advantage over children who only start learning about letters in Grade One. This research has shown that newly acquired knowledge can be difficult to apply to cognitively demanding tasks and may need to reach a level of mastery before it can be used in a novel task (Karmiloff-Smith, 1994; Miller & Coyle, 1999). Children who learn a great deal about letters and sounds in the years before schooling – at home, at preschool and in Grade R – are at a significant advantage. By the time they start Grade 1, letter-sound knowledge is a well-established system of knowledge, which can be applied to new tasks such as decoding and writing words.



However, letters and sounds are not part of the early experiences of the majority of children in South Africa. Many parents and caregivers believe that their children will learn to read at school and that it is not their responsibility to introduce letters to their children. There may be very few books available in the home and it may not be common practice for adults to point out print in the environment or play games like “I spy ...”. In many Grade R classes, children sing the alphabet song daily, but the words have little meaning for them. Some children have not drawn pictures and talked about what they have drawn, or “written” on a page and presented their ideas to a teacher or parent. When these children begin Grade 1, they can’t yet write their name, and letters are mysterious marks on a page. It doesn’t make sense to them when the teacher starts talking about sounds in words. What is a “ssss”?



Within a few weeks of starting Grade 1, these children are expected to be able to recognize an increasing number of letters, and to read high-frequency words. Children in middle-class contexts are likely to have had two or more years to learn about letters and the sounds they make. Their counterparts in less-resourced contexts are expected to achieve the same (and simultaneously learn to read and write words) in two terms in Grade 1.

The research is clear: early access to the code is critical and has an impact on early reading and writing trajectories. Far too many children in low-resource contexts in South Africa begin school with limited letter-sound knowledge and are taking too long to acquire this knowledge in Grade 1. It makes sense that if we need to increase the number of letters children know in Grade 1, having a head start would be a good idea. So, why hasn’t the teaching of letter-sound knowledge in Grade R been prioritised?

Factors that influence the teaching of letter-sound knowledge in Grade R

Curriculum and Assessment Policy Statement (CAPS)

Teaching activities and assessments are determined by curriculum documents and it is therefore critical that these documents provide clear guidelines and goals for teaching and learning. Unfortunately, CAPS (Grade R) does not provide this guidance for the teaching of letter-sound relationships.

In the CAPS document the following references to letter knowledge can be found in Term 3 and 4 under the heading *Emergent reading* and the subheading *Phonological/phonemic awareness*:

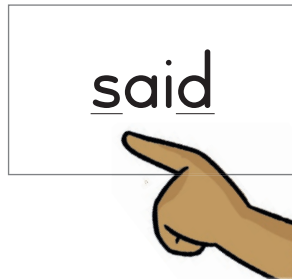
- “Recognises aurally and visually **some** initial consonants and vowels especially at the beginning of common words”;
- “Recognises and names **some** letters of the alphabet such as letters in own name” (DBE, 2011).

The use of “some” as a quantifier leaves curriculum delivery open to interpretation. The CAPS document creates further confusion by including the teaching of letters under the heading *Phonological/phonemic awareness*. Phonological/phonemic awareness is the ability to hear sounds in words. It is a listening skill and does not include knowledge of letters. Phonics refers to the knowledge of how specific written letters relate to specific spoken sounds. In CAPS Grade R, there is no reference to phonics from pages 31–53 which cover all the content for Term 1 to Term 4 of Grade R (DBE, 2011). The curriculum needs to be clear that learners need to develop **both** an awareness of sounds in words (phonemic awareness) **and** learn to connect these sounds to letters (phonics/letter-sound knowledge/alphabetic knowledge).

The lack of guidance provided for teaching letter knowledge in CAPS Grade R seems to have been justified by the fact that CAPS Grade 1 specifies the teaching of 1–2 letters per week, with all letters to be taught in Term 1 and 2. However, in Term 1 and 2, according to CAPS Grade 1, children must simultaneously be reading and writing words (all of which demand knowledge of the letters that they are busy learning and will be learning). Well-established research findings show that letter-sound correspondence plays a role from the earliest stages of learning to read and write words (Ehri, 1997; 1998; 2005; Stuart, 1995; Stuart, Masterson & Dixon, 2000).



Emergent readers are generally not systematically decoding words, but will be listening for beginning and end sounds in words while looking for letters that relate to these sounds or noticing letters in words and using these to predict what the word says (Ehri, 1995). Without letter-sound knowledge, and an awareness of sounds in words, they will only be able to read by remembering a visual sequence of letters using whatever cues are available to them, such as guessing from the context or using word length and shape, as well as the shapes of letters. On the other hand, children who know some letters will be able to use these as cues to remember words: “Readers who can form connections out of partial phonetic cues have an advantage over readers who are limited to visual cues in building a sight vocabulary. This is because phonetic cue readers have a system they can use to remember words. In contrast, visual cue readers have to remember arbitrary, idiosyncratic connections. This makes the words much harder to remember” (Ehri, 1997, p. 175).



Exclusion of Grade R from Foundation Phase early grade reading studies

The evidence from early grade reading studies has helped to highlight low levels of letter knowledge at school entry and beyond. Despite the aim being to build evidence about what works to improve the learning and teaching of early grade reading in South African schools, these large-scale evaluations, being led by the Department of Basic Education, academics and donor organisations, all exclude Grade R. This inexplicable blind spot with regard to the grades targeted by the studies has inevitably led to recommendations that also exclude Grade R. One of the conclusions drawn from the growing evidence base in South Africa is that: “When less than 50% of South African learners in no-fee schools know all the letters of the alphabet by the end of Grade 1 and less than 50% can reach a minimal fluency threshold in Grade 2, it is clear that policy attention must shift to what is happening in Grade 1 and 2 classrooms that prevents this knowledge from being acquired” (Pretorius & Spaul, 2022, p. 1).



While there is no doubt that improving instruction in Grade 1 and 2 and providing relevant resources for teaching phonics would lead to improvements in alphabet knowledge, an equally plausible conclusion is that attention must shift to **what is happening in Grade R classrooms** that prevents children acquiring a solid base of letter-sound knowledge by the time they start Grade 1.

Critique of the teaching pedagogies associated with phonics and resistance to the explicit teaching of letters

With a strong focus on a play-based approach in the ECD sector and Grade R in South Africa, there are justifiable concerns that the teaching of letters in Grade R may go hand in hand with formal learning and might result in classrooms where children chant the alphabet, copy letters from a board or practise writing letters between lines or on paper with a pencil. Visions of young children seated at desks filling in worksheets or copying letters have understandably led to resistance and concerns about Grade R becoming a watered down Grade 1 year.

Teaching alphabetic knowledge (phonics) has a reputation for being a “skill and drill” approach to teaching “decontextualised skills” bereft of meaning. It has been associated with the rote teaching styles that characterised “Bantu education”, and “call and response” or “communalised learner performance” pedagogies. The critique of these pedagogical approaches is justified, but there is a risk of conflating outdated teaching practices with important content knowledge.

Whole language theorists have argued against explicit teaching of letters based on the premise that learning to read and write is a natural skill like learning to talk. Children learn to talk by being immersed in language, and these language theorists propose that, similarly, if children are surrounded by print and meaningful texts, they will learn letters as they encounter them: “Teachers can learn to teach phonics and



other skills as and when needed by children as they read and write” (Ellis & Bloch, 2021, p. 180). Although this type of incidental learning typifies the acquisition of letter knowledge in small learner-centred classrooms, well stocked with books and other written texts, it is difficult to picture how this would happen in large, under-resourced classes. There is in fact little research to show that this is an effective way to teach letter-sound relationships in an average classroom setting.

One of the most well-established conclusions in cognitive science is that direct instruction in the alphabetic code facilitates early reading acquisition (Rastle, Lally, Davis & Taylor, 2021; National Reading Panel, 2000). This finding extends to children from low-resource contexts (Slavin, Lake, Chambers, Cheung & Davis, 2009; Tunmer, Chapman, Greany, Prochnow & Arrow, 2013). The question seems to be not whether children are best served by being taught about letters and the sounds they make, but how to do this in ways that are meaningful and grounded in best practice.

Concerns about the teaching of letters leading to reduced teaching time for other priority skills

Recent research shows that only 45% of South African children attending early learning programmes are “On Track”, with 55% of children not able to do the learning tasks expected of children their age, and 28% of children Falling Far Behind the expected standard (Giese et al., 2022).

With only 55% of children “On track” for language and literacy, can we afford to take time to teach letters when language and meaning making should be prioritised? Oral language skills are a critical foundation for the development of literacy (Snow et al., 1998; Scarborough, 2001). Without a solid foundation of oral language skills, children might learn to read and spell words, but not understand what they read or be able to express their ideas in writing. With only 30% of children “On track” for Fine Motor and Visual Motor Integration it is evident that many children starting Grade R may never have had the opportunity to draw or hold a crayon and develop the control needed to draw basic shapes, and therefore do not have the necessary skills to begin writing letters.

Can letter sounds be taught in a way that takes into account these justifiable concerns and contextual realities?

Addressing these concerns: an opportunity to develop an early literacy programme for Grade R

In 2020, Wordworks was commissioned to design teacher’s guides, classroom resources and training materials for the Gauteng Grade R Improvement Project, building on its Stellar Grade R Home Language programme. This materials development project provided a unique opportunity to develop an affordable, open-source, evidence-based programme for South African children and their teachers in the 11 official South African languages. The development team needed to ensure that the teaching and assessment activities for the project were curriculum aligned and covered the content in the CAPS Home Language for Grade R. We were also committed to designing a programme that addressed the gaps in the CAPS guidelines for teaching alphabet knowledge in Grade R and that did not replicate poor pedagogical practices associated with teaching phonics.

In designing the programme structure and whole class and small group activities aimed at teaching letter-sound knowledge, we reviewed local and international research as well as commercial programmes, and worked with a team of experienced Foundation Phase teachers, learning support teachers and Foundation Phase Subject Advisors in South Africa. We also worked closely with the Research and Development team at Molteno Institute for Language and Literacy who have been thought leaders in the development of phonics resources and graded readers across all African languages.

Key principles that guided the programme development:

1. Children need to have a solid foundation of oral language skills to understand what they read and be able to express their ideas in writing.
2. The goal of learning about letters is not only to know more about letters. It is about children understanding the alphabetic principle and using their knowledge of letters and sounds to read and write meaningful texts.
3. Children become literate in a particular context, and their early experiences with print build their identity as readers and give messages about the purpose of reading and writing, and the value of their own contributions to texts.
4. Learning about letters and the sounds they make (phonics) builds on and goes hand in hand with becoming aware of the sounds in words (phonemic awareness).

The teaching of letter-sound relationships was grounded in a broader framework of important knowledge, concepts and skills, with the ultimate goal being children who can read and understand what they read, and are confident to express their ideas in writing. This is summarised in the infographic on the next page.

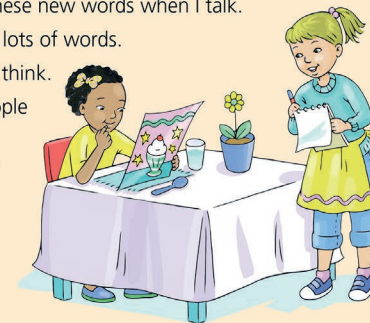


Emergent reading

- I like books and enjoy reading!
- I notice signs, logos and labels and try to read them.
- I know how to turn the pages of a book and point to words as I read.
- I use the pictures in books to help me read in my reading voice.
- I look for letters I know to help me guess what words say.
- I try to sound out words I don't know.

**Listening and speaking (oral language)**

- I know my own language well and I am learning to understand and speak other languages.
- I understand and use quite long sentences.
- I learn new words every day and I use these new words when I talk.
- I understand the meaning of lots of words.
- I talk about my ideas and I can explain what I think.
- I ask questions and give answers when people ask me questions.
- I love listening to stories. I can tell my own stories too!



**I am confident to express
my ideas in writing, and
I can read and understand
what I read.**

**Phonological awareness
(awareness of sounds
in words)**

- I enjoy songs, rhymes and listening games.
- I can hear when words have the same sounds or different sounds.
- I can hear the beginning or focus sound in words.
- I can put syllables and sounds together to make words.
- I can break up words into syllables and sounds.

**Letter-sound
knowledge**

- I am interested in letters.
- I write letters with crayons or with a stick in sand.
- I know the sounds that different letters make.

**Drawing and emergent
writing**

- I draw pictures of things I see around me, of stories and things that happen.
- I try to write about my drawings or I ask someone to write what I say.
- I write with marks and scribbles.
- I make letters and cards for my family and friends.
- I copy writing I see around me.
- I try to listen to sounds in words and write letters for the sounds I hear.
- I know how to write my name and some common words.



The Grade R Language Improvement Programme: Teacher's Activity Guides and classroom materials

The programme provides guidelines and resources for daily whole class and small group teaching activities, focused on strengthening teaching practice and thereby providing children with high-quality language and literacy learning experiences. The Activity Guides for teachers are toggled in all official South African languages alongside English. This is in recognition of the fact that teachers may be teaching in their home language, but that their high school and/or tertiary education may have been in English and they may not have adequate written language skills or knowledge of technical terms in their home language.

There are 19 story packs with one activity per day for 2 weeks (36 weeks of teaching x five activities). Each story pack includes:

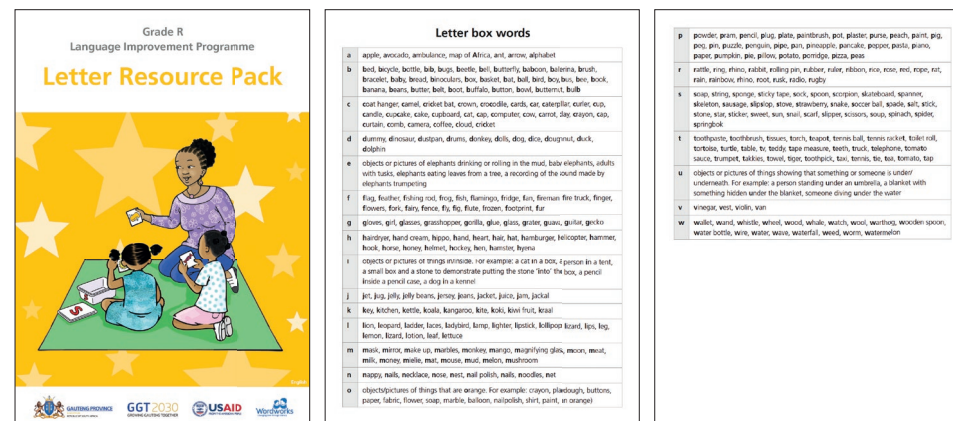
- an Activity Guide for the teacher, which provides guidelines for daily activities in a two-week cycle.
- a Big Book, a set of 2-D puppets, a set of sequence pictures, games and puzzles and a photocopiable little book.



The packs include materials for teaching letter-sound relationships and suggestions for resources that teachers can make and collect that support their teaching of letter-sound knowledge.



Teachers are encouraged to collect objects and pictures with a particular focus sound and keep these in a container or "letter box".



Programme structure: integrating the teaching of letters and sounds

The teaching of letters and sounds is integrated into a two-week cycle of whole class and small group activities that balance oral language activities (telling stories, role play and sequencing pictures), meaningful print-based activities (reading a Big Book, shared writing, drawing and emergent writing, independent reading) and activities that focus on sounds and letters.






Week 1 – Whole class activities

Whole class activities	Monday	Tuesday	Wednesday	Thursday	Friday
Story-based activities	Storytelling and building vocabulary	Storytelling and singing	Storytelling and role play	Sequencing pictures	Make, draw and write
Letter and sound activities	Introducing a sound from the story	Forming the letter	Letter boxes	Listening for focus sounds	Blending and segmenting

Week 2 – Whole class activities

Whole class activities	Monday	Tuesday	Wednesday	Thursday	Friday
Story-based activities	More sequencing pictures	Shared reading – Big Book	Learning to listen	Read and do	Make, draw and write
Letter and sound activities	Introducing a sound from the story	Forming the letter	Letter boxes	Listening for focus sounds	Blending and segmenting

Week 1 and 2 – Small group activities

Small group activities	Monday	Tuesday	Wednesday	Thursday	Friday
	Stella indicates which small group activities are teacher-guided each day.				
The blue group	Activity 1: Drawing and emergent writing 	Activity 2: Puzzles and games	Activity 3: Independent reading	Activity 4: Fine motor skills and handwriting	Activity 5: Pretend play
The green group	Activity 5: Pretend play	Activity 1: Drawing and emergent writing 	Activity 2: Puzzles and games	Activity 3: Independent reading	Activity 4: Fine motor skills and handwriting
The yellow group	Activity 4: Fine motor skills and handwriting	Activity 5: Pretend play	Activity 1: Drawing and emergent writing 	Activity 2: Puzzles and games	Activity 3: Independent reading
The red group	Activity 3: Independent reading	Activity 4: Fine motor skills and handwriting	Activity 5: Pretend play	Activity 1: Drawing and emergent writing 	Activity 2: Puzzles and games
The purple group	Activity 2: Puzzles and games	Activity 3: Independent reading	Activity 4: Fine motor skills and handwriting	Activity 5: Pretend play	Activity 1: Drawing and emergent writing 

Research on early reading and writing that guided programme development

Learning about letters and sounds: paired associate learning

Research shows that letter-sound relationships are learnt through paired associate learning: associating a sound with the written representation of the letter. By strengthening the auditory skill of hearing the sounds, strengthening the ability to form the letter, and linking these two skills, we increase the chances of learning being successful. This is the theoretical basis for the “scripted” and routine steps for introducing a letter in each week of the programme. Below is an example taken from the Concept Guide.

Listening for sounds

- 1 Ask learners to sit on the mat and listen carefully to you. Say these words from the story: “*Sam, Spot, sad, school, sock. Can you hear the focus sound: Sam, Spot, sad, school, sock? Yes, you are right! They all have the sound /s/.*”
- 2 “*Listen carefully, here are some more words with /s/: soap, sweet, swim, supper, surprise, sand, stick, swing.*” (Emphasise the focus sound as you say these words.)

Saying the sounds

- 1 Say the sound /s/ clearly and tell learners to watch your mouth carefully.
- 2 Ask learners to say the sound /s/: “*s-s-s*”. Make this fun: Say it softly, loudly, to the wall, to the ceiling and to each other.
- 3 Teach learners an action associated with the sound. For example: Learners can cross their arms in front of their chest and pretend to be rocking a baby to sleep in their arms.

Thinking of words beginning with the sound

Ask learners if anyone’s name starts with /s/ or if they can think of any other words that start with the sound /s/.

Forming the letter

- 1 Ask learners if they know how to write a letter that makes the sound /s/.
- 2 Show learners how to write the letter **s**. Praise their attempts, then write a large letter on the board or in the air while saying the following: “*Start at the dot, over the top, turn, across the middle, turn and go back.*”
- 3 Let learners practise the letter formation in the air, on the mat, on each other’s backs or on their hands. They can also try using their bodies to make the letter.

Linking the letter to the alphabet chart

If you have an alphabet chart in your class, show learners the letter **s** on the alphabet chart. Explain that this letter also has a name: “*ess*”. This will help them to link the sounds they are learning with the letter names and the alphabet song.

In addition to providing opportunities to pair sounds with the written form of the corresponding letters, the steps above include a key feature of good teaching practice: they provide structure and routines which help learners to anticipate what will come next and remove anxiety from the learning experience. They also serve to strengthen perceptual skills such as auditory discrimination (the ability to recognise whether sounds are the same or different), visual motor integration (making sense of visual information and then using that information in another activity that uses motor skills), position in space (spatial awareness) and directionality.

Phonological awareness and the importance of understanding the alphabetic principle

One of the key tasks facing the beginning reader is to understand the alphabetic principle and the writing system: What are these letters for? How do you use them? Written language is different to spoken language, and it is a big conceptual step for learners to understand that written letters are a representation of the sounds in spoken words, even if this representation is only approximate. In order to take this important step, children need to learn to focus on sounds in words (phonological awareness) in addition to word meanings. They might know the meaning of the word “run”, but might not know about the sounds that make up this word. For example, in isiXhosa, the word **baleka** is made up of three syllables: **ba | le | ka** and starts with the sound /b/. Other words also have this sound (such as **bala**, **bomvu**, **ubuso**). Once children have an awareness of sounds in words, they can make sense of why they are learning letters, namely the letters are linked to the sounds in words they speak. The programme includes weekly activities to strengthen children’s ability to hear focus sounds in words, break words into syllables and sounds, and blend these syllables and sounds to make words.

Being able to hear sounds in words, and knowing the letters that represent these sounds is not an end in itself. The programme’s two-week teaching cycle includes multiple opportunities for young children to develop an understanding of the alphabetic principle and see how letters and sounds are used for reading and writing. The use of letters in writing is demonstrated through shared writing activities where learners contribute ideas to a shared writing piece (with the teacher writing their words) and through drawing and emergent writing where the teacher asks children about their drawings and writes down their words.

The training programme includes a focus on “invented spelling” as a key milestone in children’s literacy development and one of the first signs that a child has understood the alphabetic principle. It is also an excellent way to reinforce phonemic awareness and letter knowledge, and to motivate children to learn new letters. It is a cause for celebration when children ask questions like, “I want to write about my puppy. How do I make a /p/?” What seems obvious to literate adults is one of the greatest discoveries children will ever make and will put them on the road to participating in one of humanity’s greatest inventions – reading and writing.



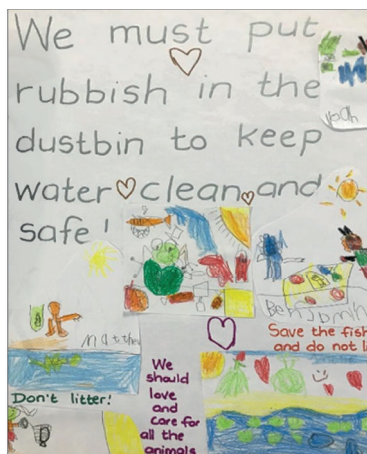
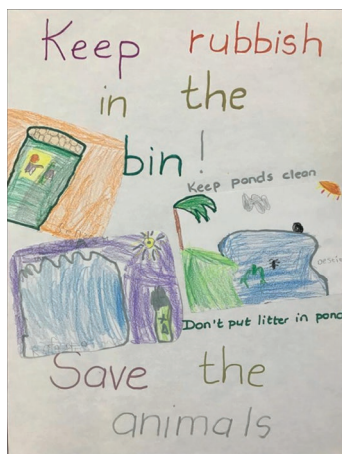
The purpose and value of reading and writing

Once children understand the alphabetic principle, they are on their way to developing a self-teaching system where the more they engage with texts, the more they can use their existing letter knowledge to work out what words say and infer new letter-sound relationships. It is vital that they have many experiences with print – and not just the experience of reading lists of words on a board. From early in their literacy journey, children need to understand the value and function of print. They need adults who point out and model using print in the environment, and they need to be given opportunities to contribute their ideas to a written piece.

The two-week cycle includes many activities that help children to use and see the purpose of the letters they are learning. Teachers are provided with a Big Book based on an oral story the children have been told where they encounter the same, familiar story but in print form. The familiar phrases and words from the oral story help children to make the link between spoken words and print. As the teacher models reading a Big Book and points to print, children see that the letters they are learning about are found in books and carry a message.

Teachers are encouraged to model writing a text for a purpose (a letter, a list, a song) so that children see how writing works and how what we say can be written down. This activity begins with rich discussions and sharing of ideas, with contributions from learners encouraged and acknowledged. Even though they cannot yet write by themselves, children start to see that writing has a purpose and that their ideas matter. They also see how their spoken words can be represented by the letters they are learning about. The following examples show how children are involved in using writing for a purpose.

Example 1: Creating a poster to raise awareness about keeping rivers clean (based on a story about a frog)



Example 2: Writing an invitation for the principal to attend a running event (based on a story about running a race)

Make, draw and write

- 1 Tell learners that you are very excited: *"We are going to have a running race for our class, just like Lindi! Let us invite our principal to come and watch the race and hand out prizes."*
- 2 Talk about the most important information to put on an invitation: the name of the principal; the day and time when the race will take place, and of course, the place where the race will take place.
- 3 Address the invitation: *"To [write the name of your principal]"* on a big piece of paper in a thick marker pen.
- 4 Together with learners, agree on the other information you need to write on the invitation: Event, Day, Time, Place.
- 5 Write down ideas as learners make suggestions.
- 6 Ask learners: *"What other information must we put on our invitation?"* You could suggest the following: *"Thank you for coming to our race and handing out prizes."*
- 7 Read the complete invitation together with the learners, pointing to each word as you read.
- 8 Ask some learners to draw pictures to decorate the invitation using crayons and then arrange for them to deliver it to the principal.
- 9 Make sure you hold the race on the agreed date, and at the time written on the invitation.

Example 3: Writing a card (based on a story about a boy whose mother has just had twins)

Make, draw and write

- 1 Explain to learners that they are going to pretend to be Thabi and help you make a card to welcome Mom and the twins.
- 2 Ask learners if anyone knows how to start writing a message in a card. Explain that we usually start cards with the words: Dear ...
- 3 Then discuss what to write next. Once you have agreed, write the words of the learners on the card. After modelling writing two to three sentences, ask learners to help you think of what to say at the end of the card.
- 4 Some learners can decorate the card if there is time.

Creating a print-rich classroom environment also helps learners to see the purpose of letters and print. This is not just about the print and posters on the walls, but about the way teachers draw children's attention to print and use it in meaningful ways. Putting labels on storage boxes is the first step, but then the next step is thinking aloud about which resources you're looking for and then reading the labels out loud with the learners, for example, "It's time for puzzles. Now, which box has the puzzles in it? Aaah, I see a /p/ for puzzles on this label!"

As programme developers and teachers, we know we have succeeded in helping children to understand the purpose of print when they begin to use pretend writing and reading in their play. For example, making a sign for a shop, making a shopping list, writing a prescription for medicine or taking down orders in a pretend restaurant. Each two-week cycle has a small group pretend play activity linked to the story, incorporating reading or writing into the pretend theme where possible.



Principles of teaching and learning in Grade R

Educational research in classrooms has highlighted principles which contribute to successful learning. These principles guided the development of the materials for the Grade R Language Improvement Programme.

Meaning making

Young children learn best when new learning has meaning and is connected to something they already know about. Letters and sounds are therefore introduced in the context of a story in this programme. At the beginning of each two-week cycle, learners hear words spoken in the story and learn the meanings of these words. Then the teacher helps them to pay attention to a **focus sound** in the words and links this to the formation of the letter. Learners are more likely to recall sounds and letters because they are connected to a story and words that are meaningful – they are going from the known (the words from the story) to the unknown (a new letter). In this way, we avoid a situation where learners recite letters and sounds as a rote and meaningless activity.

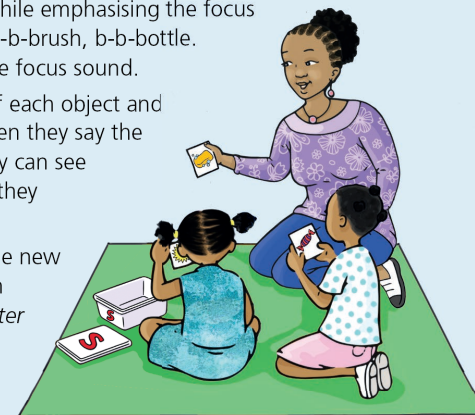
In developing the programme, the selection of letters for each story began with a review of the story to establish which sounds were repeated across a number of

words. Because the stories were written in 11 different languages, the choice of focus sounds and letters for a story was not the same for each language.

In addition to drawing on words from stories, the programme also uses pictures and objects to give children opportunities to practise listening for sounds in words. Teachers are provided with picture cards for 18 letters (pictures of common objects that include the focus sound). They are also encouraged to make up their own "letter boxes" with objects and pictures that feature the focus sound. The letter box activity includes a strong focus on meaning: children hold and describe an object, say the name of the object, listen for the focus sound – and then link this to the associated letter.

Letter boxes

- 1 Ask learners to sit on the mat and show them the objects and pictures in the letter box one at a time. Ask them for the names of the objects. If there are learners who speak different languages, ask them to tell the class what they call the object in their home language. Then give the word in the language of instruction. Let them hold the objects or pictures and pass them around.
- 2 Ask questions about the objects: "Have you seen one of these? What do we use this for? What colour is it? How does it feel?"
- 3 Say the names of the objects while emphasising the focus sound, for example: b-b-bug, b-b-brush, b-b-bottle. Ask learners if they can hear the focus sound.
- 4 Ask learners to say the name of each object and emphasise the focus sound when they say the words. Use a mirror so that they can see how their mouths move when they make the sound.
- 5 Once learners have practised the new sound, show them the letter on the letter box and say: "This letter is how we write **b**." Let some learners trace over the letter on the lid with their fingers.



Being active and using the senses

Young children learn best by being active and by being involved in hands-on activities where they can link new words and concepts with actions and real experiences. They use their bodies and all their senses to explore and learn about the world around them.

Building on this principle, the Concept Guide provided to each teacher in the Grade R Language Improvement Programme, includes the following guidance for teachers regarding teaching letters and sounds:

- Young learners should learn how to form letters through big movements and through experiences that involve all their senses. Letter formation must be taught in multisensory ways such as painting a letter on concrete with a paintbrush dipped in water, making a letter from playdough, linking the formation of a letter with the sound it makes, or tracing letters in a tray filled with sand.
- It will be easier for learners to hear sounds in words by connecting the sounds to physical actions and concrete objects. This can be done, for example, by encouraging learners to clap or hop for each syllable or sound, or to move counters as they say each syllable or sound in a word.



The Activity Guides for teachers include practical examples for teachers to make the learning of letters an active and multisensory experience.

Examples of sound actions across languages:

/m/ – rub tummy as if seeing tasty food and say *m-m-mnandi* (delicious – isiZulu/isiXhosa)

/b/ – pretend to bounce a ball while saying *b-b-bolo* (ball – Sesotho/Sepedi) – *bola* (TshiVenda)

/f/ – flap arms and pretend to fly while saying *fofa, fofa* (fly – Sesotho/Setswana)

/u/ – pretend to be riding a motorbike while saying *xithuthuthu* (motorbike – Xitsonga) – *isithuthuthu* (isiZulu/isiXhosa)

/n/ – put your arms out in front and pretend to be stars shining while saying *n-n-n-naledi* (star – Setswana/Sesotho)

/p/ – make a heart shape and put it over your chest where your heart is while saying *p-p-pelo* (heart – Sepedi/Setswana/Sesotho)

/d/ – pretend you are dancing while saying *d-d-dansa* (dance – isiZulu)

One of the small group activities in the programme involves learners practising letter formation in a multisensory way: writing a letter with different colour crayons to make a rainbow letter, making letters out of playdough, and tearing

and sticking paper or other small objects onto a letter template. These activities have the added advantage of simultaneously strengthening fine motor skills which are so critical for writing.



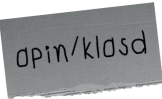

Playing

Learning to hear sounds in words and link these sounds to letter symbols requires much practice and repetition and the best way of ensuring this practice is through play. Games like “I spy with my little eye” help learners to identify the beginning sounds in words. Board games and games made from recycled materials help to give much needed practice of letter-sound relationships.

- Snake game: Learners throw the dice and if they land on a letter they must say the sound the letter makes and then look for a picture that starts with that sound.
- Tortoise game: Learners pick up a bottle lid and look at the letter on the underside. They must say the sound the letter makes and look for a picture that starts with that sound.
- Egg box game: Learners shake the egg box and when they open it, they must see which hole the bean landed in and say the sound of the letter in that hole, and then look for a picture that starts with that sound.



Pretend play is another form of play that is vital for literacy development. In addition to building communication and language skills, children use toys and recycled objects to represent other things and learn that one thing can "stand for" or represent another. This will help them to understand that the writing on a page stands for the words we speak and that a letter can represent a sound. Pretend play also affords unique opportunities for children to use reading and writing for a purpose, and start to use the letters they are learning about to communicate a message. The programme includes suggestions for print and writing materials for pretend play. Here is an example from the teacher's Activity Guide:

You will need	Activities
<ul style="list-style-type: none">Props: cardboard and a whiteboard marker for making a sign for the restaurant, a pencil and paper for waiters/waitresses to take orders, a chef's hat, table and chairs with tablecloth, cups, plates, cutlery, old phone, take-away menus 	<p>Activity 5: Pretend play</p> <ol style="list-style-type: none">Lead the group to the pretend play corner and settle them down quickly.Show learners the new props, and explain that to follow the theme of taste and smell, they are going to play in a restaurant.Ask them to make a name/sign for the restaurant, a menu, a sign saying open/closed. They can pretend to make the food, and serve people sitting in the restaurant. They can also pretend to phone the restaurant and order take-away food.Visit the corner at least once to observe and encourage the learners' game. For example: You could "phone" and put in a take-away order. 

Some practical considerations

Through designing the programme with these core principles in mind, we ensured that the methods and activities for teaching of letters and sounds were appropriate for young learners. Key decisions also needed to be made about the programme content – the order of teaching letters and how many letters to teach. We also had to ensure that letter order, activities and word lists were appropriate for each language.

In what order are letters introduced?

Children are not being taught to decode in Grade R, and so order is less important than in Grade 1 where phonics programmes may be aligned to word lists or graded readers that target specific letters. As described above, focus sounds were selected because they occurred in many words in a story and letters selected for each story were language specific. It was necessary to analyse stories in each language to identify which sound occurred frequently, and to ensure that the target sounds were covered twice during the year. In some instances, we adapted character names or added words such as adjectives to stories to ensure we had enough words with a specific focus sound in a story.

In each language there are some letters that occur more frequently and it makes sense for learners to master these letters, rather than focusing on letters that occur in very few words. For example, the National Framework for the Teaching of Reading in African Languages in the Foundation Phase (DBE, 2020) states that "the 12 most frequently used consonant sounds in isiXhosa are l, k, m, b, z, s, y, w, ng, w, n, kh". (Only the single consonants would be taught in Grade R.)

Vowels were introduced in Term 1 and 2 for African languages as per the recommendation in the National Framework for the Teaching of Reading in African Languages in the Foundation Phase, which states that "the following steps should underlie phonics instruction in the African languages. 1. Vowels first: Teach the five vowel sounds first ..." (DBE, 2020, p. 24). In English and Afrikaans, as vowels occur most frequently in the medial position in single syllable words (for example, *cat*), consonants were introduced first, with vowels being introduced in Term 3 and 4. English has the added complexity of vowel letters representing more than one sound – another good reason to begin with consonants so that the writing system makes sense to children before introducing exceptions.

How many letters to teach in Grade R?

Given the vague guidelines provided in the CAPS document, in developing the programme we worked with senior Foundation Phase Subject Advisors to determine the number of letters that would be introduced. Young learners take time to master letter-sound correspondences, and are very unlikely to recall them after being introduced to them the first time. The programme focuses on 18 letters (5 vowels and 13 common single consonants) which means that learners would be exposed to teaching activities targeting these letters twice during the year, giving a greater chance of successful mastery of these letter-sound correspondences. In addition, learners would be exposed to these and other letters through writing their names, DBE workbook activities and incidental encounters with print in the environment.

The following assessment rubric was developed to assess letter-sound knowledge in Grade R. The number of letters to be learnt increases incrementally from Term 1 to Term 4.

Assessment criteria	1 Not achieved (0–29%)	2 Moderate achievement (30–49%)	3 Adequate achievement (50–74%)	4 Outstanding achievement (75–100%)
Term 1 Recognises aurally and visually some consonants and vowels	Is not able to recognise any letters and say the sounds that these letters make.	Is able to recognise 1–3 letters and say the sounds that these letters make.	Is able to recognise 4–6 letters and say the sounds that these letters make.	Is able to recognise 7–8 letters and say the sounds that these letters make.
Term 1	0	1–3	4–6	7–8
Term 2	0	1–4	5–7	8–10
Term 3	0–3	4–6	7–11	12 or more
Term 4	0–5	6–9	10–17	18 or more

If learners achieved these targets for letter-sound knowledge in Grade R, they would have a base of alphabet knowledge to begin reading and writing words in Term 1 of Grade 1 as per CAPS.

In the South African context where the majority of children learn to read and write in an African language, there is a further reason why *early* mastery of the alphabetic code is important. African languages have many complex consonants including blends, digraphs and trigraphs.⁴ These complex consonants appear in simple texts in Grade 1 and knowledge of complex consonants is needed to begin reading a passage in an African language. This makes it even more urgent for children to master single letter-sound correspondences in Grade R, as there is pressure to sound out blends and learn digraphs and trigraphs early in their reading and writing trajectory.

⁴ Consonant blends are made up of more than one consonant, but it is still possible to distinguish the sounds of these consonants (in English, an example would be the blend “fr” in the word “frog”). Digraphs and trigraphs are new sounds made by two or more consonants (in English, “sh” and “th” are examples of digraphs).

Teaching letters and sounds across 11 languages

Developing materials across all 11 official South African languages meant that letter-sound activities, word lists and games needed to be developed for each language rather than just being translated from English. As the programme had the dual goal of helping children to associate a letter with a sound *and* being able to hear this sound in a spoken word, we needed to decide which sounds in words to focus on. In English, young children find it easier to hear the first sound in words and so it makes sense to help them to focus on the beginning sound and then link this to a letter. There are some challenges with this approach.

Challenges across different languages	How we overcame this challenge
There are few common words in English that start with short vowel sounds. Vowels make different sounds when combined with other vowels.	Rather than using words that start with the letter o but not the sound /o/ (for example: owl, over, oil), we chose a few key words that start with short vowel sounds and made these the focus of activities. For example: the letter box for o includes objects and pictures that are orange.
There are no words in Afrikaans that start with the short vowel sound /u/.	As vowels were taught in Term 3 and 4 in Afrikaans, children had been focusing on beginning sounds for two terms and we could start using words where the focus sound was in the middle of the word and therefore harder for children to hear. There are words in Afrikaans where the u short vowel appears in the medial position: <i>brug, mus, bus</i> .
African languages (and in particular Nguni languages) have very few nouns that start with consonants. Nouns generally have a vowel at the start of the word indicating the noun class.	When teaching consonants we used verbs as examples, where possible. When nouns were used, we focused on the first consonant in the word. For example: /p/ – <i>ipensile</i> (isiXhosa), /k/ – <i>ikati</i> (isiZulu), /s/ – <i>isiba</i> (isiNdebele). When teaching vowels we used words where vowels occurred twice or more in a single word. These words are good choices for drawing children’s attention to the very important vowels in African languages. For example: <i>buruku</i> (Xitsonga), <i>morogo</i> (Sepedi), <i>boroto</i> (Setswana), <i>isipikili</i> (isiZulu), <i>panana</i> (Sesotho), <i>ugubudu</i> (isiNdebele), <i>phiriphiri</i> (TshiVenda).

For the reasons above, when designing activities that focused on sounds in words, we referred to “focus sounds” rather than only referring to “beginning sounds”.

In developing word lists for each language, we tried to ensure that the focus sound could be heard clearly. For example: /s/ – **sokisi** (Xitsonga), /b/ – **bolo** (Sepedi), /n/ – **naledi** (Sesotho), /l/ – **lepel** (Afrikaans).

We included a few words with consonant blends which make it harder to distinguish a focus sound, but where each sound in the blend could be heard. For example: /f/ – frog. We avoided words that contained digraphs where the two or three consonants together make a new sound. For example: the word **shweshwe** starts with the letter **s**, but it begins with the sound /sh/; the word **kgalase** (glass in Sesotho) starts with the letter **k**, but it begins with the sound /kg/; the word **iqhoshha** (button in isiXhosa) has the letter **q**, but the /qh/ click sound is aspirated.

Here is an example of part of a word list created for using letter boxes to teach letters in isiXhosa.

Amagama esiXhosa eebhokisi zoonobumba

a	ibhanana (banana), isibhakabhaka (sky), ibhathata (sweet potato), amaqanda (eggs), uganda-ganda (tractor), amanqwawwa (stairs), thandaza (pray), isandla (hand), iplanga (wood), isangqa (circle)
b	ubuso (face), ubisi (milk), ibuzi (rat), bomva (red), baleka (run), ubusi (honey), busika (winter), uboya (fur)
c	icikilishe (lizard), icici (easing), icephe (spoon), ucango (door), ucingo (fence), icawa (church), iculo (song or hymnbook)
d	idiliya (grapes), idangatye (flame), idolo (knee), idada (duck), idesika (desk), idonki (donkey), idayisi (dice), idami (dummy), dada (swim)

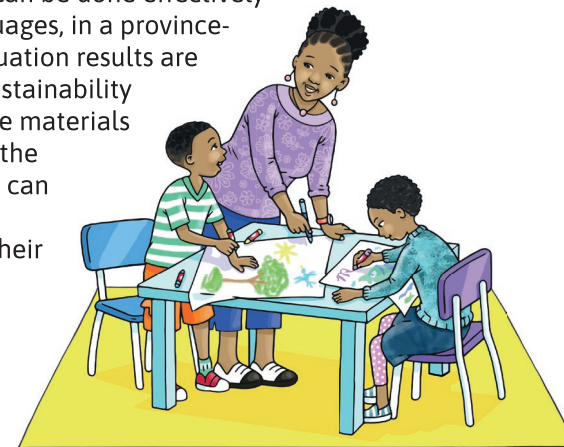
Conclusions

Given the literacy crisis in South Africa, and growing evidence that children in low-resource contexts are not acquiring alphabet knowledge in Grade 1, it is critical that we make optimal use of Grade R. Optimising learning of letter-sound correspondences in Grade R has the potential to influence the learning trajectories of young children. However, this is currently not specified in CAPS, nor is it coming through in recommendations from large-scale reading interventions. Unless the Grade R curriculum gives teachers clear messages about important foundations for literacy that need to be laid in Grade R, it serves to perpetuate the status quo. Starting off with limited early literacy skills, children are not able to meet the demands of the Grade 1 curriculum, and this sets them on a path towards reading failure.

In the development of the materials for the Gauteng Grade R Language Improvement Programme, we endeavoured to show that letter-sound knowledge can be taught in a meaningful context that simultaneously builds oral language and helps children understand the alphabetic principle and the purpose of print. We demonstrated that the principles that guide best practice in teaching young children can be incorporated into activities to teach letters and sounds so that Grade R does not become a watered down Grade 1. We developed open-source materials and guidelines for low-cost resources that teachers can make to build important perceptual skills while simultaneously giving children valuable opportunities to learn about letters and the sounds they make. We ensured that letters were taught in meaningful contexts and incorporated in activities that demonstrate the applications, purpose and value of letters. Importantly, we showed that letters can be taught within a programme that gives children the message that their attempts are valued and that their voice matters.

The real magic of these activities and principles is that they can be used to guide learning at both school *and* at home. Many of the activities developed for the Grade R Language Improvement Programme can (and are being) incorporated into home or after school programmes.⁵ Learning about letters and the sounds they make is challenging and the task is made easier if all the adults in children's lives are on board.

The Grade R Improvement Project gave us a chance to show how letter-sound correspondences can be taught effectively in Grade R within a story-based programme. It has shown how this can be done effectively in all 11 official South African languages, in a province-wide intervention. Preliminary evaluation results are pointing to the effectiveness and sustainability of the programme. We hope that the materials developed for the programme, and the principles guiding the development can be used to give more children the chance to befriend letters early in their school career and open the door to the world of written words.



⁵ See, for example, the TIME programme (Together in my Education) at <https://www.homeliteracy.org.za/time/>. This programme is being adapted and versioned for use by parents of Grade R children as part of the Grade R Language Improvement Programme.

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Wordworks is a South African non-profit organisation that focuses on early language and literacy development in the first eight years of children's lives. Since 2005, Wordworks has developed and shared its programmes and materials with those adults best positioned to impact on young children's language and literacy development (www.wordworks.org.za).

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Further information about the project as well as creative commons licensed resources can be accessed here: <https://www.jet.org.za/clearinghouse/projects/grade-r-maths-and-language-improvement-project/resources> or contact the developers at info@wordworks.org.za.

