From Language to Literacy - Potential to Achievement

Let's pretend we can look inside the brain of a 5 year old at school entry. Imagine there are five 'buckets' in the language part of the brain; some have been filling up since the child was born and some are waiting to be filled.



Bucket 1 contains all the words the child has ever heard in his life – spoken words, heard through engaging in conversations, overhearing words in real life or on TV, radio, in songs, on digital devices etc. Bucket 1 stores the phonological properties of words – what they sound like.

Children start school with lots of words in this bucket.

Bucket 1 = breadth of vocabulary



Bucket 2 contains all the words that when the child hears them, he knows their meanings and how to use them. These words will all be in Bucket 1, but all the words in Bucket 1 will not necessarily be in Bucket 2. Many words in Bucket 1 may have meaning attached to them that is sketchy, partially correct or even incorrect. Bucket 2 holds words that are *correctly* used and understood for both meaning and use.

The number of words in this bucket when children start school depends on their exposure to conversation and explanation, and on their experiences in the world.

Bucket 2 = depth of vocabulary



Bucket 3 contains the complete visual representations of words that have been seen before in print, and that have been stored in visual memory. Some of these are easily recognised and correctly translated into the spoken word; some are recognised but perhaps mispronounced because they are visually similar to other words (prefect/perfect, were/where). For these words to be pronounced at all, the visual image must link to words that are in Bucket 1; for them to be useful for understanding the meaning and use of the printed word, they must be in Bucket 2 as well.

When children start school, this bucket might be completely empty or it may contain some written words.

Bucket 3 = whole word recognition



Bucket 4 contains knowledge of the alphabetic code – a mixture of phonemes (sounds) and graphemes (letters and spelling patterns that represent sounds in print) and the links that exist between them.

Most children start school with little if anything in this bucket. They may recognise and be able to name the letters of the alphabet, which is a start, but alphabet knowledge is not the same thing as knowledge of the alphabetic code.

Bucket 4 = knowledge of the alphabetic code of written English



Bucket 5 contains knowledge of the spelling system that underpins written English – the rules and conventions that influence why words are written the way they are (why the spelling of /ow/ is different in words like *mouse* and *cow*, why the spelling of /k/ is different in *cat* and *kitten*), and why some letters or spelling patterns are pronounced differently in different words (why the letter c sounds like /k/ in *cat* but /s/ in *ceiling*, why the letter g sounds like /g/ in *goat* but /j/ in *giraffe*). Knowledge in this bucket helps readers to pronounce words correctly, and writers to spell words correctly.

It takes many years to develop this knowledge and this bucket will be empty at school entry.

Bucket 5 = knowledge of the spelling system that underpins written English

Learning to read and write English

We know: In order to read, children need to learn to decode words (turn written words into spoken words) and to understand what the words they have read mean in the context they are used. In other words they need word-level knowledge (whole word recognition skills and knowledge of the alphabetic code), and language comprehension skills (a depth of vocabulary knowledge that allows them to understand the meanings and use of words).

In order to write, children need to learn to record the spoken word (to spell the words they want to write). They might spell words by retrieving the whole image of the word from visual memory, or by breaking them into individual sounds and recording each sound. This sounding out strategy might produce a word that sounds right, but looks wrong. Spelling words *correctly* requires access to accurate whole word memory and to knowledge of the spelling system of written English.



Efficient readers and writers have access to all of these buckets.

We know: All good readers and spellers are able to read and write words they have never seen before. They use their knowledge of the alphabetic code and their blending skills (putting sounds together) to pronounce words as they read, and their knowledge of the alphabetic code and their segmenting skills to record words as they write.



Knowledge of the alphabetic code makes every word accessible.

Strategies for reading the words on the page

- 1. Use knowledge of what whole words look like (*word recognition*) and link this to the pronunciation of the word.
 - Children need to have been exposed to words on multiple occasions for them to be stored in visual memory and they have to know what the word sounds like (and means) when they see it.



2. Use knowledge of the initial sound, the meanings of words (semantics) and the structure of sentences (syntax) to predict a word that could fit into the sentence and make sense.

Children need a depth of vocabulary knowledge.



3. Use knowledge of the alphabetic code to work out the pronunciation of words. Children might use their knowledge of graphemes (letters and spelling patterns that represent a single sound, such as – a, t, ch, ai, ou, ey etc.) or groups of letters in words (*and*, *est*, *ent*, *ton*). However, the alphabetic code is diverse.

There are different ways of pronouncing the same grapheme:

- a -about/apron/apple
- ch chip/chef/chorus
- ai train/said
- ou soup/count/young
- ey they/money

There are also different ways of pronouncing the same group of letters in different words:

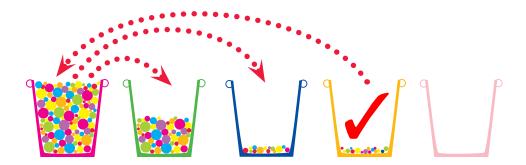
wand, band

best, greatest

bent, different

stone, ton, button.

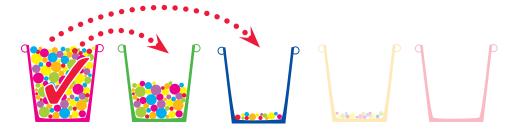
Children need phonemic awareness skills (the ability to blend sounds together to pronounce words), knowledge of the alphabetic code, and an understanding that there are different ways of pronouncing the same letters or groups of letters.



Strategies for writing the words we can say

1. Spell whole words retrieved from visual memory.

Children need to have seen, stored, and be able to retrieve images of the words they want to use, in order to write them from visual memory.



2. Spell words by sounding them out and recording each sound.

Children need to be able to break words into individual sounds, and to be able to write every sound of English in at least one way.



3. Spell words correctly by thinking about what the word looks like (whole word memory), by sounding out the word (using the alphabetic code), AND by thinking about the rules and conventions that influence English spelling.

Children need to have seen, stored and be able to retrieve images of whole words, be able to break words into sounds and to record sounds using knowledge of the alphabetic code, and to use knowledge of the spelling system that underpins written English to make words look right.



Different strategies access different buckets.
We need to teach children to use ALL these strategies,
not just some.

We need to build on what children already know to accelerate their achievement.

Starting with words children can say is the best option.

Learning the Alphabetic Code

The Problem

Phonics programmes that focus on teaching phoneme-grapheme relationships rarely teach all the sounds of English in the first year at school (although some do), and they usually teach one phoneme, one grapheme relationships.

Effective instructional strategies

Always teach from the *known to the unknown* – from sounds to print.
 Children know what words sound like before they learn what words look like.



 Use words from children's spoken vocabularies to teach phonemic awareness skills (blending and segmenting skills). These skills do not rely on knowledge of print and can be learned using sounds and words from any language.

Every child has vocabulary they can access. Some children may need explicit instruction and practice with blending and segmenting skills.



 Use the words that children generate to enhance their depth of vocabulary knowledge.

Children learn quickly from the knowledge of their peers.



• Teach the alphabetic code through learning to hear and record phonemes, rather than through learning to pronounce graphemes.

We can teach all children this way.

Example:

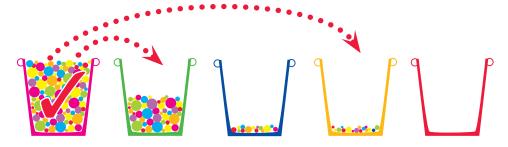
Teach children to pronounce a sound and to think of words they know that have this sound. Write the words the children think of on the board. Show children how the same sound can be written in different ways *in the words they have thought of*. They will discover that the same sound can look different in different words.

/z/ – zip, zoo, zebra, has, is, was, xylophone

We found three ways of writing z/z - z, s and x – and there might be more!

/k/ – cat, kitten, duck, Christmas

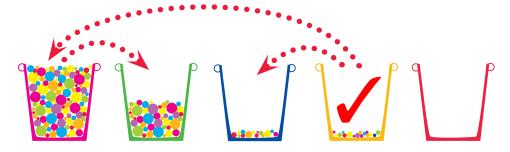
We found four ways of writing $\frac{k}{-c}$, k, ck and ch – and there might be more!



Teach children to expect diversity in the way phonemes are written and graphemes are pronounced from *their first exposure* to the alphabetic code.

Understanding this concept about how written English works – being 'set for diversity' or 'set for variability' – is essential for the development of fast, accurate reading and spelling skills and it impacts on word recognition, vocabulary development and reading comprehension.

All children need to understand this.



Children start school with words that they know – this is their strength. We can use this as a platform to build literacy skills.