



## DO CHILDREN REALLY NEED TO KNOW WHAT A SPEECH SOUND IS?

Learning to read and write should be an exciting time in an individual's life, but the process itself is *very* complex. Like learning to speak, however, this complexity is not always apparent until the learning doesn't take place as expected.

It is true that there is no single way to teach reading and writing that will suit EVERY child, but what we do know is that several areas of learning are vital for a good quality literacy program... and this is where the importance of SPEECH SOUNDS comes into it. Following the National Inquiry into the Teaching of Literacy in Australia in 2004, the following statement was made as part of the executive summary...

**"The evidence is clear ... that direct systematic instruction in phonics during the early years of schooling is an essential foundation for teaching children to read. Findings from the research evidence indicate that all students learn best when teachers adopt an integrated approach to reading that explicitly teaches phonemic awareness, phonics, fluency, vocabulary knowledge and comprehension."**

This article focuses on the two of these areas that relate to speech sounds; **phonemic awareness and phonics.**

When children have poor awareness of sounds in words (poor phonemic awareness) or when they fail to master letter-sound links (for phonics tasks), the process of reading can be tedious and problematic. By identifying confusions early, and helping the child overcome these, persistent difficulties can be avoided. Many of these difficulties concern the concept of "a speech sound."

Firstly, it is important as a teacher of literacy – whether you are a teacher, aide, parent or speech pathologist - to be clear yourself about these specific concepts of literacy. Too many times have I been told by a teacher that they are teaching phonemic awareness, when it turns out that they are referring to phonics.

### **What is Phonemic Awareness?**

Not only is phonemic awareness confused often with phonics, but it is also confused with the term "phonological awareness". Phonemic awareness is, in fact, just *a part of* phonological awareness. Where phonological awareness can refer to a more broad awareness of the sound structure of words (such as rhyme and syllables), **phonemic awareness refers to the very specific awareness of individual sounds (or phonemes) within a word (or syllable).**

## WHAT THE RESEACHERS HAVE SAID

The best predictor of reading difficulty in kindergarten or first grade is the **inability to segment words and syllables into constituent sound units** (phonemic awareness)" (Lyon, 1995). Note: "Kindergarten" refers here to the first year of school.

The **ability to hear and manipulate phonemes** plays a causal role in the acquisition of beginning reading skills (Smith, Simmons, & Kame'enui, 1998).

Reading and phonemic awareness are mutually reinforcing: **Phonemic awareness is necessary for reading**, and reading, in turn, improves phonemic awareness still further." (Shaywitz, 2003)

Note: Despite the importance of *phonemic* awareness, other phonological awareness tasks, such as clapping out of syllables, still have their place. Rhyme and syllable tasks, are important for young learners, because, being generally easier to complete, they are often used to "switch on" a child to attending to the sound structure of words. Through this, a more refined and sophisticated analysis of a spoken word can begin to develop (phonemic awareness).

This, however, does not come easily for all children. Perceiving individual sounds in a word is a somewhat abstract concept, because when we hear a word, we do not naturally hear it as individual sounds, but as sounds that are blended. That is why even literate adults, when attempting to break a word into sounds (phoneme segmentation) can have a lot of trouble. It is something that must be taught explicitly and practised for the sake of learning to become literate, and many adults have forgotten how to do this.

When phonemic awareness is intact, it enables an individual to do a range of tasks .

These include:

- Identifying the first sound in a word,
- blending individual sounds to make a word
- segmenting a word into its individual sounds
- swapping the first, middle or last sound of a word with another
- removing the first or last sound of a word etc. etc...

**In other words, phonemic awareness allows an individual to play around with the individual sounds of a word, and when letter-sound links are also learnt (see phonics below), it allows this phonemic awareness to be used functionally for reading and spelling tasks.**

Take for example, three children who want to spell the word MEN. They have never seen this word before. They all know lots of letter- sound links.

One child tackles the word this way: He says the three sounds of MEN *"/m/... /e/... /n/"* and then writes the letter that he knows can represent each sound.

The second child thinks: *"I know how to spell TEN. MEN is the same but with a different first sound, so I will write the letter that makes the first sound of MEN and then chop off the letter that makes the first sound of TEN and write the remaining letters."*

The third child knows how to write and name lots of letters. He has also learnt what sound goes with the letters. He knows that M makes a /m/ sound because the teacher has carefully and explicitly taught a range of letter-sound links. Despite this, the third child has no idea how to tackle the spelling of this new word MEN. The teacher is surprised. This child's name is BEN and he knows how to write his name, so she prompts him: "Think of the first sound in MEN. If you can write the letter for that sound ... then the rest of the letters are the same as in your name."

The child looks at her blankly. He doesn't understand what she is talking about. Although he has mastered letter names and sound links, he only knows how to spell words by remembering the order of letters – or by remembering the *look* of the word. He has failed to understand what a speech sound really is and how it relates to a word.

Let's go back to the first two children. Both of these young learners, nutted out a way to spell the word using different strategies, but both utilised their **phonemic awareness**. When the third child tries to spell a novel word, he has nowhere to go because this child is not tuned into how sounds relate to words. **So how would you teach him? How would you "switch him on" to speech sounds in words?**

Some teachers say to me that they use the *Singing Alphabet* (Love and Reilly) but when it comes down to it, they are simply singing through the song, showing each card and pointing to the letters as they sing the each single sound. Often this is not enough for a child to really understand what a speech sounds are, and how they relate to letters and words. The song, as presented on the Singing Alphabet CD, encourages far more exploration of sounds and how they relate to words, thus promoting phonemic awareness.

Other teachers may say to me that they are using a program such as the Speech Sound Set and are explicitly teaching about individual sounds, their mouthshapes and their features. When doing this, they are also systematically teaching children the letter that usually links to the sound. Again, this is wonderful and it is an important part of literacy, but it is not enough if a child does not understand how a speech sound (or phoneme) relates to a word.

**So what is a phoneme? A phoneme is a speech sound.** It is defined by Gillon (2004) as "the **smallest unit** of sound that influences the meaning of a word." This definition, of course, is not child-friendly (nor is it adult-friendly for many!)

Some people confuse the concept of speech sound with the concept of **a letter** and this can cause long-lasting problems with literacy. I frequently hear adults prompting children with "What letter can you hear at the start of that word?"

So this is something that we need to get clear because letters and sounds are completely different. English has 26 letters, but over 40 sounds (phonemes).

The word "tree" has three phonemes but four letters and "shrink" has five sounds and six letters. The letters SH represent a single phoneme, however the letter X represents two phonemes.

Often I also hear from teachers and parents that "Capital letters say the letter name and lower-case say the sound" but this is totally incorrect and will interfere with early learner's understanding of these concepts. This confusion may have arisen from acronyms like DVD and TV where the capitals are used to write the "word".

Remember, if **the concept of a phoneme and how it relates to a letter or a word** is not perfectly clear to YOU, then how can it be for a new learner?

Each year, when I screen children at the start of school, I assess a child's awareness of initial sounds (phonemes). At this stage, I expect a child to demonstrate *some* first sound awareness after I have chatted to them about sounds and words and given them lots of examples. Most children will understand what the task is all about and will give me at least *some* indication that they are hearing sound units within words. For example, when asked, "What is the first sound in PLATE?", a young learner might say "/p/" or "per" or "/pl/" or even "play". All of these are *acceptable* responses when starting school (the last one being the least acceptable). Some children even jump straight to saying the letter name **p**. This could suggest they know the spelling of the word, or they may be identifying the first sound and linking it to a letter. In this case, I would say "Great that's the first letter in the word PLATE, but can you tell me the first *sound*?"

When some children respond with something like "SMASH" or by saying "Plates don't make sounds," I know they are not understanding the concept of "sound" that I am referring to. These children will often say the word MOUSE starts with the sound "squeak squeak" and that HORSE starts with "neigh". At this point, these children should be flagged and carefully monitored. They will probably need some extra individualised teaching about speech sounds and how they relate to words. If you help them grasp the concept early, rather than carrying on in confusion, problems with literacy may be avoided. These children will NEVER learn to use phonics or sounding-out if they are not aware of what a sound is in the context of reading and writing.

## **Is Phonics Important?**

Phonics instruction is based on the regular sound-letter and letter-sound relationships in writing. There are several different approaches. "Synthetic phonics" is an explicit approach that involves linking individual sounds to letters and linking letters to individual sounds. Using these links, children learn how to build words (writing) and pull them apart (reading). This is also known as "sounding out". For this approach, a knowledge and awareness of individual phonemes and the letter links is vital.

Another type of phonics instruction is called implicit or "analytical phonics". This approach avoids the isolation of individual phonemes and encourages children to use their current knowledge of words and their patterns to assist in the writing or reading of other similar words. This method expects that children will "crack the code" when exposed to patterns of words and for many children this is true, but what is underlying this, is a working phonemic awareness, which all children do not have.

**Research, tells us, that many children, particularly those from disadvantaged backgrounds, will not perform well with this analytical approach and will need the more systematic and explicit teaching method that involves phonemic awareness training.**

As the National Inquiry into Teaching literacy concluded, "the **synthetic phonics** approach, as part of the reading curriculum, is more effective than the analytic phonics approach, even when (analytic phonics) is supplemented with phonemic awareness training."

## EXPLICIT TEACHING ABOUT SOUNDS.

When children begin formal literacy learning, it is a great idea, as part of a balanced literacy program, to include explicit teaching about individual sounds and the letters that link to these. This should be done in a systematic manner, whereby each sound (or each letter) is explored. As a teacher, you will have made one major decision about how to do this.

**Are you a teacher who introduces a letter then explores the sound that it links to?**

***(This is more common in USA) OR***

**Are you a teacher who introduces a sound then explains about the letter that it links to?**

***(This is more common in UK).***

Recently, I posed this question on Love and Reilly's Facebook page and there was a variety of responses. Neither is a more correct way of tackling this early learning. The importance lies in whether you are consistent and clear in your chosen method of teaching.

As a speech pathologist, I like to present the sound first and how it relates to a word (initial sounds) and then learn the letter it links to. This make sense to me, because many of the children I work with have poor awareness of sounds and often poor production of sounds, so THIS is the area I want to strengthen.

Some teachers say that they like to show the letter first and then link it to the sound because many children already come to school with a knowledge of letter names, so it makes sense to start with something familiar and work from there. This also makes sense as we know that when children already have a name for something (eg. a letter name), they will find it easier to make and remember a sound link. Unfortunately, in recent years, I am finding more and more children are coming to school with little or no letter naming ability.

**Following are some examples of how a sound or letter may be introduced. (By no means are these prescriptive. They would be accompanied by lots of sound practise and visual and verbal demonstration.)**

**A teacher who introduces a letter then explores the sound that it links to...**

*"This is the letter s (ess) and it makes the sound /s/. This sound is at the start of sit. Can you hear it? Here is the written word sit. I can see the letter s (ess) at the start... so I make my mouth start with /s/.../s/...it." OR*

**A teacher who introduces a sound then explains about the letter that it links to**

*"Can you make the sound... /s/? It sounds a bit like what a snake says... /s/ ... but we don't stick our tongue out like a snake /s/... We can use a letter to write this sound. Here's the letter. It's called s (ess).*

*This sound /s/ is at the start of words like sit. Let's say sit and feel where our mouth starts... sit. Did you hear and feel the /s/ at the start? When I write sit, I start with letter that makes this sound... s (ess)."*

Both the examples above may seem very long-winded and complicated to some readers, but this is actually what explicit teaching is all about. Careful, slow, systematic and clear teaching is required so *everything* is explained and the new learner, who often comes to literacy with a blank slate, has the best chance to crack the code of reading and spelling.

Some programs, such as Letterland, Jolly Phonics, and The Speech Sound Set include lots of extra cues (visual, movement and semantic) that help children link an individual sound to a letter/s or a letter to a sound. One of my programs, The Speech Sound Set (from [www.pellicantalk.com](http://www.pellicantalk.com)), uses a meaningful human or animal character for each sound, has the character demonstrate the mouthshape, has a little story that explains why the character makes the sound, and also links the sound to a letter (and later on, to several letter options).

Many teachers, have reported that learning how to use such programs have made them better teachers of literacy, because it has alerted them to the nature of each sound and strengthened *their* phonemic awareness.

**OVER THE NEXT FEW PAGES ARE SOME TIPS FOR UNDERSTANDING AND OVERCOMING POTENTIAL CONFUSIONS OR DIFFICULTIES THAT MAY ARISE IN RELATION TO SPEECH SOUNDS AND THE LETTERS THEY LINK TO.**

**Child is unable to identify sounds in words.** Some children have a lot of difficulty with perceiving individual sounds in words. Try the following:

\*In your teaching be sure to teach about individual sounds and sound-letter links, but also how these relate to actual words. This is absolutely vital. Give lots and lots of examples, of the sound in the initial position of words.

\*To begin, expect children to perceive only the *first sound* in words. After giving lots of examples, you can then do some comparing of words. Present two words that start with the same sound and then one word that starts with a very different sound. (Remember this is a listening task only, so if using pictures, there should be no written words visible). After you have talked about the sound /s/ and played around with it in isolation, lay out pictures (or objects) of **sun, sock, lamp**. Say each word and ask "Let's find the ones that start with /s/. There's one that starts with another sound... let's see if we can hear it."

\*Long sounds such as /s/, /m/ and /f/ can be "held on to" at the start of words so are often a good place to start for children who cannot yet perceive sounds. Unlike short sounds like /d/ and /b/, a long sound can be accentuated without distorting the word. "Ssssssssock."

\*Be aware that sounds in the other position of words may confuse early learners, so if you laid out **sun, sock** and **mouse**, while listening for /s/ at the start, they may perceive the /s/ in mouse as an initial sound.

\*Check that the child's hearing is OK. Also, if they have lots of sound errors in their speech, a referral to a speech pathologist is recommended. Some children's auditory system or phonological system may be impaired and thus, need further attention.

\*Use lots of multisensory cues. If a child's auditory system is impaired, they may need to be tuned into the oral characteristics of the sound or the feel of a sound. For example, when teaching about the sound /m/ that goes with the letter M, you would explain that you **put your lips together and make a loud sound that comes out your nose**. (The Speech Sound Set is a great program for exploring all of these features). Then, when you then say the word "MAKE", you would say "Watch my mouth and listen. Can you see and hear what sound I am saying? /mmmmmmm/ ake?"

\*Give LOTS of clear examples. Remember that many children cannot naturally blend sounds to make words. For these children, distinct sounds such as /sh/ ... /oo/ have nothing to do with the word "shoe". A fun activity to try and enhance this awareness is as follows: I use pretty glass stones and I call them "sound stones". I say that "every stone is a sound".

I show the two stones lying together in my palm and say “*Here is the word SHOE. I am going to give you the sounds in this word SHOE.../sh/... /oo/*”. As I say each sound, I drop a stone into the child’s open hand. I then say “*You’ve got the word SHOE, can you give me the sounds now?*” Back and fro, I do this, until the child “gets” what I am doing. I do it with words like “SHOE, OFF, SEE, SAY, ME, FOUR, KNEE” and then words like “PEA, KEY, EAT, TWO, GO” . When this is easy for the child, I introduce three sound stones and use them with regular consonant –vowel-consonant words (cat, pig, man, him, lip) and so on... This program is available commercially as SOUND SEGMENTER from [www.pelicanstalk.com](http://www.pelicanstalk.com) and I find it works very well, particularly with young boys.

**Child knows the alphabet but doesn’t know that it relates to sounds.**

Sometimes teachers say to me “this child knows their alphabet” but they report that they are stuck when it comes to sounds. Check exactly what “knowing the alphabet” means. It may mean that a child is able to recite the alphabet just like reciting a nursery rhyme or singing a song. This can be a good start to letter awareness, but is not enough. Often when these children are presented with random letters, they do not know the names. “Knowing the alphabet” in a rote-learnt fashion is unlikely to be a great help in learning to read and write, if they do not learn what each letter stands for.

“Knowing the alphabet” can also refer to a child knowing how to name all the letters of the alphabet, no matter what order they are presented. It is like a naming task. Research tells us, that being able to name letters at the start of school is a strong indicator that the child will be successful in early literacy tasks. It has been proposed that this occurs because the children who know letter names come from more literate environments where literacy learning is generally more supported, but it has also been found that when children know the name of something (their letters), they can more quickly learn what it relates to (its sound).

For children who don’t know the sound links, it is time to teach them! Be consistent in your teaching and be clear in your use of the terms “letter name” and “sound”. If the child responds with a name of a letter, when you ask about a sound, be clear in your feedback; “Great, that’s the *letter name*, but the *sound* is....”

Talking to parents about the concept of sounds versus letters is also a good idea.

**Child has not learnt letter-sound links sufficiently.**

Some children have learnt some letter-sound links, but when thoroughly investigated, they do not know enough to attempt to decode or encode words. Of course, we don’t expect young learners to know ALL the letters that represent ALL the sounds (vowel sounds are extremely variable), but when it is the basic, regular letter-sound links that have not been learnt, it may be suggestive of an impending problem. Some children may be having difficulty with the shape of a letter and may confuse it with one that is visually similar (b,d or h,n). This will of course interfere with fluent and automatic sounding-out, as some letter-sound links are not yet mastered. For these children, identify the letters and sounds you would expect them to know at their particular stage of learning, and provide some extra individualised teaching to help them master these.

**Child has learnt letter-sound links incorrectly.**

Children sometimes think that the sound of the letter is derived from the first sound of the name of the letter. This works for some letters (t, b, j,d,v,p,z) but not for others (l,s,m,n,x,w,y). Keep an eye out for this one, as in my experience, it is a common one for children who are having difficulty learning letter-sound links. The classic is the child who thinks y (why) says /w/ and u (you) says /y/. This again, is about identifying the problem and intervening early with some targeted intervention.

**Child is confusing the concept of letters and sounds.**

Some children will use a letter to represent a sound (or group of sounds) . Eg. the letter **r** to represent the sound /ar/ (write “prk” for “park”) and **s** to represent /ess/ (write “ms” for “mess”). Your feedback to a child should be along the lines of; *“Good try, but you’ve written the letter **r** for the sound /ar/. What sound does the letter **r** make? It doesn’t make /ar/ ...that’s its name ...that’s right, the sound it makes is /rrrrr/. So if I read your word it would say /p/.../r/... /k/....prk! The sound /ar/ is actually written with the letters **ar** ...”* If a child is not clear about the concept of letter and sound, then they will struggle following your feedback. Again, make sure your teaching about these concepts is clear and that parents and reading volunteers are clear on the concepts as well.

**Child think capitals and lower-case represent different things.**

When you are teaching about sounds and letters, be sure to refer to the capital and lower-case (and even different fonts) when talking about letters. Be sure to stress that we call lower-case and capital letters by the same letter name and that they both make the same sound.

**In summary,**

- Phonemic awareness is essential when learning to read and write using an alphabetic writing system. Without phonemic awareness, phonics does not make sense. Without an awareness of individual sounds in words, synthetic phonics instruction cannot be put into practice.
- Learning letter-sound links, does not mean that reading will follow, nor does the learning of sound-letter links mean that writing will follow. Phonemic awareness is the key that underpins all phonics programs.
- There are many confusions and problems that can occur with regards to phonemic awareness and also with the linking of phonemes to letters (and vice versa). By being aware of these and addressing them early, we can help our children reach their best potential with regards to literacy.
- In the teaching of early literacy the following is vital:
  - \*consistent use of terminology
  - \* explicit and systematic teaching about letters, sounds and words and how they all interrelate
  - \*use of a range of multisensory cues
  - \*thorough, ongoing assessment
  - \*early intervention if problems or confusion arise



## Further Reading:

\*Article 22: Linking Sounds and Letters

\*10 Tips for Increasing Phonemic Awareness

\* Preparing My Preschooler for Reading and Writing

See *Pelican Talk Free Stuff Page* [www.pelican-talk.com](http://www.pelican-talk.com)

\*Big Ideas in Beginning Reading [http://reading.uoregon.edu/big\\_ideas/pa/pa\\_what.php](http://reading.uoregon.edu/big_ideas/pa/pa_what.php)

## Products Available for Purchase:

\*The Singing Alphabet - Love and Reilly

\*The Speech Sound Set - for sound awareness and letter links - Pelican Talk Speech Therapy Resources.

\*Sound Segmenter – for segmenting the phonemes of short words and letter links – “uses sound stones” - Pelican Talk Speech Therapy Resources

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Also: Jolly Phonics <http://jollylearning.co.uk> and Letterland [www.letterland.com.au](http://www.letterland.com.au)

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