# What is phonological awareness and why is it important?

Yopp & Yopp (2009) define phonological awareness as "...sensitivity to the sound structure of language. It demands the ability to turn one's attention to sounds in spoken language while temporarily shifting away from its meaning" (p. 12). It is students understanding that speech is composed of words; words can be divided into syllables and onset-rimes; syllables and onset-rimes can be divided into individual sounds (phonemes). Mody (2003) reminds teachers that how speech is constructed is not necessarily obvious to listeners as it "...is a highly complex signal made up of coarticulated segments, with acoustic information for each segment (consonant or vowel) overlapping extensively with information from neighboring segments" (p. 30). It is coming to an understanding about the segmental nature of speech by distinguishing and manipulating the sound structure of language (Suortti & Lipponen, 2013). Numerous researchers and commentators have highlighted the importance of ensuring that all students have secure phonological awareness because it has been found to be a key component needed for beginning reading acquisition and is considered a predictor of reading achievement (Cooper, Roth, & Speece, 2002; Copeland & Calhoon, 2007; Cormier & Dea, 1997; Deacon, 2011; Engen & Høien, 2002; Gray & McCutchen, 2006; Hogan, Catts, & Little, 2005; Iacono & Cupples, 2004; Mody, 2003; Phillips, Clancy-Menchetti, & Lonigan, 2008; Pullen & Justice, 2003; Rvachew, 2006; Vloedgraven & Verhoeven, 2007; Wackerle-Hollman, Schmitt, Bradfield, Rodriguez, & McConnell, 2013). Lane, Pullen, Eisele, & Jordan (2002) further expound that "Among the numerous reliable predictors of later reading performance (e.g. socio-economic status, mother's education) that educational researchers have identified phonological awareness is one of the few that educators are able to influence significantly" (p. 102). The significance of students having an awareness of the sound structure of spoken words ahead of other out-of-school influencing factors is also supported by Carson, Gillon, & Boustead (2013) and Vloedgraven & Verhoeven (2007). Schuele & Boudreau (2008) maintain that "Although not all children with poor phonological awareness have difficulties learning to read, most do" (p. 3).

## Links with reading

Phonological awareness skills are mostly aural while later developing phonic skills (letter-sound knowledge) require students to provide sounds for written letters (visual). "Phonemic awareness is one aspect (and the most difficult) of phonological awareness. It is the ability to attend to and manipulate phonemes, the smallest sounds in speech" (Pullen & Justice, 2003, 88).

On their own, phonological awareness skills will not take students to being independent and successful readers but they are essential precursors for development of later reading skills. There is a strong link with oral language growth (Rvachew, 2006), vocabulary expansion, and development of lettersound knowledge (phoneme-grapheme/phonic relationships) and spelling skills (Chard & Dickson, 1999; Lane, Pullen, Eisele, & Jordan, 2002; Mann & Foy, 2007; Rvachew, 2006).

As Yopp & Yopp (2009) highlight "We must be able to notice and have a firm grasp of the sounds of our speech if we are to understand how to use a written system that records sounds. Individuals who are unaware that speech is made up of small soundsthose who don't notice and cannot mentally grab hold of and manipulate them-have difficulty learning to read a written system based on sounds" (pp. 14-15). Development of phonological awareness skills starts in the emergent literacy stage (often in the preschool years) when young people are beginning to 'join the dots' about words, for example, through having been read rhyming texts and subsequently repeating these rhymes themselves and when they engage in word play, for example, slithery, slippery snakes. Pullen & Justice (2003) make the point that "...it is critical to realize that exposure long precedes mastery; increasing explicit engagement in and exposure to phonological awareness activities is more important than relentlessly pursuing mastery of such concepts" (p. 90). Logically then, teachers intentionally plan to build on what four year olds bring into the preschool setting and this can be readily and meaningfully embedded within a play-based curriculum. There is a symbiotic relationship where "Instruction in phonological awareness can affect positively a child's reading skills and instruction in reading can improve a child's phonological awareness skills" (Cupples & lacono, 2000 as cited in Copeland & Calhoon, 2007, p. 42).

# Factors that influence development of phonological awareness

- Compromised hearing ability will significantly affect students' capacities to develop phonological awareness as it is primarily developed through listening (receptive language).
- 2. Auditory processing and auditory memory. Being able to hear, manipulate, and 'hold' individual sounds in words.
- 3. Articulation. Students' correct pronunciation of words so that sounds can be accurately named.
- Teachers' clear, consistent, and unexaggerated articulation of sounds (Lane, Pullen, Eisele, & Jordan, 2002; Phillips, Clancy-Menchetti, & Lonigan, 2008). "Teachers also need to model correctly the space between sounds when conducting blending and segmenting activities" (Phillips, Clancy-Menchetti, & Lonigan, 2008, p. 10).
- 5. Students understanding the language of instruction for example, what teachers mean when they ask for the identification of the first, second, next, and last sound in a word.
- "... phonological awareness instruction should be provided to all preschool and kindergarten children; this instruction aims to establish a foundation of ability on which to build decoding and spelling skills in the early elementary years" (Schuele & Boudreau, 2008, p. 7).

"There is considerable research evidence to indicate that children who begin school with relatively strong phonological awareness-the ability to reflect consciously on the sound structure of language-are more likely to learn to read with relative ease than children who enter school with poor phonological awareness" (Catts, 1993; Snow, Burns, & Griffin, 1998; Vandervelden & Siegel, 1995 as cited in lacono & Cupples, 2004, p. 438).

- 7. "...explicit and systematic type of instruction that follows a carefully planned scope and sequence and that intentionally includes a focus on building conceptual understandings in the process of helping children to master specific tasks" (Phillips, Clancy-Menchetti, & Lonigan, 2008, p. 8). Understandably students would then need a range of opportunities to apply these skills in meaningful ways.
- 8. Frequent and regular 10-15 minute whole-class and small group sessions that are active and interactive (Carson, Gillon, & Boustead, 2013;

Copeland & Calhoon, 2007; Lane, Pullen, Eisele, & Jordan, 2002; Phillips, Clancy-Menchetti, & Lonigan, 2008). Shapiro & Solity (2008) suggest that practice activities could be as brief as a few minutes each.

- Learning with their teacher AND their peers.
  "...activities are auditory and *interactive in nature* (emphasis added), children do not develop phonological skills by doing independent work" (Lane, Pullen, Eisele, & Jordan, 2002, p. 104).
- 10. Systematic and explicit instruction for students where Standard Australian English is not their first language. "When learning a new language, they may have difficulty hearing the phonemes in the language that are different from phonemes in their native language or that are not present in their native language (Iverson et al., 2003 as cited in Copeland & Calhoon, 2007, pp. 43- 44).
- 11. Recognising that students with disabilities have the potential to develop phonological awareness skills and that this may occur at a later age (Copeland & Calhoon, 2007).
- 12. Understanding that the development of phonological awareness is not linear in nature so teachers may simultaneously teach more than one of the skills. Students do not need full mastery of one skill before moving onto another (Lane, Pullen, Eisele, & Jordan, 2002; Pullen & Justice, 2003).
- "...limiting task variability within the instructional session makes learning the task easier. Attempting to teach too many skills in one session can be overwhelming for the novice learner" (Phillips, Clancy-Menchetti, & Lonigan, 2008, p. 9).

# Instructional approaches

## Word awareness

Lane, Pullen, Eisele, & Jordan, (2002) remind educators that "When a child utters a single word that he has only heard in combination with other words, he is demonstrating the word level of phonological awareness" (p. 102).

- 1. Listen while I say a sentence. How many words did you hear me say?
- 2. Listen while I say a sentence. Shake the maraca or click the castanet for how many words you hear me say.
- 3. Push out a counter for how many words you hear me say in this sentence.
- 4. Tell me a sentence and I (teacher) will count the number of words in it. Am I right?

- 5. Name a compound word. *How many words did you hear me say?*
- 6. Name a compound word e.g. football. Now say football without foot.



#### Syllable awareness

Each syllable must contain a vowel or a letter must have a vowel-like quality, for example, the '*ee*' sound for 'y' in *happy*. Start with longer multisyllabic words (student names are ideal) that can be spoken in an exaggerated way.

- Ask students to put their fingers on their chin. Have them say the nominated word and count the number of times their chin moves. *How many syllables did you feel (hear)?*
- 2. Name a word and have students tap/clap each syllable they hear.
- 3. Say a word, one syllable at a time, and ask students to blend the syllables together and name the word.
- 4. Name a word and ask students to delete/take away one syllable. Say haircut. Now say haircut without cut. What syllable is left?
- 5. Slowly say a word by exaggerating each syllable. *It is an animal. monk----ey. What animal is it?*
- 6. Robot speak. Say the word like a robot would say it.
- 7. Stand up if your name has one/two/three syllables.
- Teachers of older students can use key content words and names of media and sporting personalities to confirm students' syllabification skills.

## Onset-rime (intrasyllabic) awareness

Onsets are the consonant letter/s prior to a vowel in a syllable. The remaining letters are the rime. Lane, Pullen, Eisele, & Jordan (2002) remind teachers that "Because a syllable must contain a vowel, all syllables

must have a rime, but not all syllables have an onset (e.g. and, out, or)" (p. 103).

#### Rhyme

Words that sound the same in the middle and at the end are said to rhyme even though the words may not be spelled the same e.g. *got'* and *'yacht.'* 

- Help students isolate the rime of words to develop an understanding of rhyming. For example, "Fat has at, does ban have at?"
- 2. Listen while I say two words. Be ready to tell me if they rhyme. Do they have the same middle and end sound? (car/far, seat/feet, blue/carrot).
- 3. Which of these words rhyme with book (look/table)?
- 4. Which of these words do not rhyme with mouse (shed/house)?
- 5. Tell me a word that rhymes with fair/been/share.
- 6. Use students' names and challenge them to find words that do/do not rhyme with them (even if it is a nonsense word).
- 7. Select names of animals/objects and add a rhyme (even if it is a nonsense word).
- 8. Substitute different rhyming words in well-known verses e.g. *Hickory Dickory Dock, the mouse ran up the wok.*
- 9. Feely bag. Pull out two items, name them, and state whether they rhyme.
- 10.Use rhyming poetry and popular texts such as Dr Seuss.©
- 11.Play rhyming snap, memory, and bingo games.



#### Phonemic awareness

Consciously hearing each of the individual sounds (phonemes) in words can be quite challenging because words are said in one pulse, for example, when hearing the word 'seen' listeners hear 'seen' (not s-ee-n). This overlapping or merging of sounds is

known as coarticulation (Lane, Pullen, Eisele, & Jordan, 2002). Students' phonemic awareness is primarily developed by giving them a range of listening (aural) tasks. However, some students will likely need the added support of being able to look at objects or pictures as they think about how to respond.

## <u>Alliteration</u>

Start with initial sounds and then move onto final and middle sounds.

- 1. Listen while I say some words and be ready to tell me if they start with the same sound (Joel/Jessica, Chloe/Kirby, Michaela/Reagan).
- 2. Practise saying tongue twisters.
- 3. Look at alphabet books and names words that start with the same sound.
- Yopp & Yopp (2009, p. 18) suggest using a puppet e.g. Leo Lion says everyone's name starting with an 'l' e.g. Lenry (Henry), Laitlin (Caitlin) or Peter Parrot who says everyone's name with a 'p' e.g. Pucy (Lucy), Piley (Riley).
- 5. Have students sort their high-frequency words into categories e.g. words that do/do not start with the same sound.
- 6. Have students step on words that share the same first/middle/final sound.



## **Isolation**

- 1. What is the first sound in turtle/one/sad?
- 2. What is the last sound in Craig/dentist/apple?
- 3. What is the second sound in snake/trip/hug?
- 4. Sort high-frequency words by their first, second, last sound.
- 5. What one is it? Show two objects (e.g. pencil & ruler) and name them. I am thinking of the object that starts with the sound 'rrr.'

- 6. Line up at the door if your name starts with 's.' Come to the front if your name ends with 'ee.'
- 7. Play 'I spy.'

## **Segmentation**

- 1. Stretch out all of the sounds you hear in the word 'yet' (yyy-eee-ttt)
- 2. The word is blue. What are the sounds in blue (b-l-ue)?
- 3. Interlocking bricks. Give student three bricks. *Tell* me the three sounds in 'wish' (w-i-sh).

## Blending

- 1. I'm going to name some sounds and I want you to tell me what word I have said (b-e-n-d).
- 2. I'm going to name some sounds and I want you to tell me what word I have said (ch-o-p).
- 3. Show students two objects e.g. a book and a mug. *I want the mmm-uuu---ggg. What do I want?*
- 4. Blend sounds together for as long as it takes to go down a slippery dip.

## Manipulating/Exchanging

- Listen while I say a word. The word is 'cat'. Take away the 'c' and put 'p'. What word is it now?
  - I. The word is 'pat'. Now take away the 't' and put an 'n'. What word is it now?
  - II. The word is 'pan'. Now take away the 'a' and put an 'e'. What word is it now (pen)?
- Make this process more challenging by using a student's first name and removing the first sound and replacing it with another e.g. '*Tessica*.' Who is it (Jessica)? (Chard & Dickson, 1999, p. 266).
- 3. When students can identify some alphabet letters this process of manipulating/exchanging can be done using letter tiles or cards so that teachers can see students' responses.



# References

Carson, K.L, Gillon, G.T., & Boustead, T.M. (2013). Classroom phonological awareness instruction and literacy outcomes in the first year of school. *Language, Speech, and Hearing Services in Schools, 44*, 147-160.

Chard, D.J., & Dickson, S.V. (1999). Phonological awareness: Instructional and assessment guidelines. *Intervention in School and Clinic, 34*(5), 261-270. Cooper, D.H., Roth, F.P., & Speece, D.L. (2002). The contribution of oral language skills to the development of phonological awareness. *Applied Psycholinguistics, 23*, 399-416.

Copeland, S.R., & Calhoon, J.A. (2007). Word recognition instruction. In *Effective literacy instruction for students with moderate or severe disabilities.* Baltimore, MA: Paul H. Brookes.

Cormier, P., & Dea, S. (1997). Distinctive patterns of relationship of phonological awareness and working memory with reading development. *Reading and Writing: An Interdisciplinary Journal, 9*, 193-206. Deacon, S.H. (2011). Sounds, letters and meanings: The independent influences of phonological, morphological and orthographic skills on early word reading accuracy. *Journal of Research in Reading,* 1-20. DOI: 101111/j.I1467-9817.2011.01496.x Gray, A., & McCutchen, D. (2006). Young readers' use of phonological information: Phonological awareness, memory, and comprehension. *Journal of Learning Disabilities, 39*(4), 325-333.

Engen, L., & Høien, T. (2002). Phonological skills and reading comprehension. *Reading and Writing: An Interdisciplinary Journal*, *15*, 613-631.

Hogan, T.P., Catts, H.W., & Little, T.D. (2005). The relationship between phonological awareness and reading: Implications for the assessment of phonological awareness. *Language, Speech, and Hearing Services in Schools, 36*(4), 285-293.

Iacono, T., & Cupples, L. (2004). Assessment of phonemic awareness and word reading skills of people with complex communication needs. *Journal of Speech, Language, and Hearing Research, 47*(2), 437-449.

Lane, H.B., Pullen, P.C., Eisele, M.R., & Jordan, L. (2002). Preventing reading failure: Phonological awareness assessment and instruction. *Preventing School Failure*, *46*(3), 101-110.

Mann, V.A., & Foy, J.G. (2007). Speech development patterns and phonological awareness in preschool children. *Annals of Dyslexia*, *57*(1), 51-74.

Mody, M. (2003). Phonological basis in reading disability: A review and analysis of the evidence. *Reading and Writing: An interdisciplinary Journal, 16*, 21-39.

Phillips, B.M., Clancy-Menchetti, J., & Lonigan, C.J. (2008). Successful phonological awareness instruction with preschool children. *Topics in Early Childhood Special Education*, *28*(1), 3-17.

Pullen, P.C., & Justice, L.M. (2003). Enhancing phonological awareness, print awareness, and oral language skills in preschool children. *Intervention in School and Clinic, 39*(2), 87-98.

Rvachew, S. (2006). Longitudinal predictors of implicit phonological awareness skills. *American Journal of Speech-Language Pathology*, *15*(2), 165-176. Schuele, C.M., & Boudreau, D. (2008). Phonological awareness intervention: beyond the basics. *Language*, *Speech and Hearing Services in Schools*, *39*(1), 3-20. Shapiro, L.R., & Solity, J. (2008). Delivering phonological and phonics training within whole-class teaching. *British Journal of Educational Psychology*,

*78,* 597-620.

Sodoro, J., Allinder, R.M., & Rankin-Erickson, J.L. (2002). Assessment of phonological awareness: Review of methods and tools. *Educational Psychology Review*, 14(3), 223-260.

Suortti, O., & Lipponen, L. (2013). Phonological skills and ability to perceive auditorily the structure of a word at the level of a single phoneme at ages 2-6. *Journal of Early Childhood Literacy*, 1-24. DOI: 10.1177/1468798413512847

Vloedgraven, J.M.T., & Verhoeven, L. (2007). Screening of phonological awareness in the early elementary grades: an IRT approach. *Annals of Dyslexia*, *57*(1), 33-50.

Wackerle-Hollman, A.K., Schmitt, B.A., Bradfield, T.A., Rodriguez, M.C., & McConnell, S.R. (2013). Redefining individual growth and development indicators: Phonological awareness. *Journal of Learning Disabilities*, 1-16. DOI: 10.1177/0022219413510181 Yopp, H.K., & Yopp, R.H. (2009). Phonological awareness is child's play! *Young Children, 64*(1), 12-21.

Funded by the Australian Government Department of Education, Employment and Workplace Relations as one of the *Closing the Gap* Initiatives. This initiative was managed by the Australian Primary Principals Association.