Phonemic Awareness "PHacts" and "Phun"

Dr. Lucy Hart Paulson, EdD, CCC- SLP

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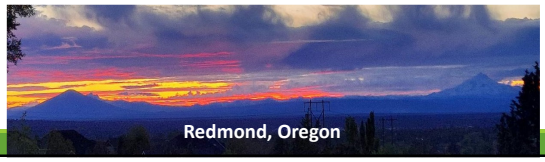
Dr. Lucy Hart Paulson, EdD, CCC-SLP

- Author
  - *LETRS for Early Childhood Educators (2018)*
  - *Multisensory Basic Language Skills* (Birsh & Carreker, 2019) Chapter 6 Phoneme Awareness
  - Good Talking Words
  - Building Early Literacy and Language Skills
- Literacy Consultant
- Speech-Language Pathologist
- Associate Professor (retired)
  - Instruction and research in language and literacy development and challenges.



A Few Queries

1. **T** or **F** Phonological awareness requires alphabet letters.
2. Which do young children learn to manipulate first? Syllables or Sounds
3. The word "fix" has this many sounds: _____
4. The word "catch" has this many sounds: _____
5. What phonological awareness skill at the beginning of kindergarten is strongly predictive of literacy learning in second grade?

Today's Agenda

- Phonemic Awareness PHacts
- PA Developmental Trends
- PA Phun Instruction and Intervention Strategies

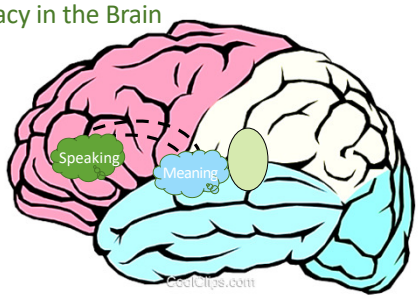
Language and Literacy in the Brain

Broca's area: involved in production of speech sound

Wernicke's area: involved in Understanding of speech

Motor cortex: controls the Movements of muscles

Arcuate fasciculus: connects Wernicke's area to Broca's area.

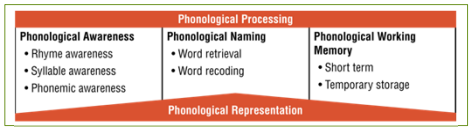


"PH"onological Processing Ponders

What is your understanding of these "PH" terms?

☺ ☹ Phonological vs phonemic awareness
☺ ☹ Phonological naming, retrieval, and recoding
☺ ☹ Phonological working memory
☺ ☹ Phonological sensitivity
☺ ☹ Phonological representation

Phonological Processing Components



(LETRS EC, Paulson & Moats 2018)

- **Phonological awareness:** Ability to *consciously manipulate* syllables and sounds (phonemic awareness) in oral language
- **Phonological naming:** (access to lexical storage): Ability to *retrieve* words from long-term memory
- **Phonological working memory:** Ability to process and recall sound information in *short-term memory*

Phonological Representation

- How the pronunciations of known words are stored **("inner speech")**.
  (Gillon, 2017; Metsala & Walley, 1998)
  - Phonological representations of whole words to word parts (segmental units) is necessary for the development of explicit phoneme awareness.
    (Rvachew, Nowak, & Cloutier, 2004)

Phonological Sensitivity

Time period when infants and toddlers become "sensitive" to speech sounds, syllable patterns and word boundaries. (Morais, 1991; Guttorm et al., 2005; van Goch, McQueen, & Verhoeven, 2014)

Rhyme sensitivity emerges with speech sound development. (Rvachew & Grawburg, 2006)

Babies born up to three months premature can recognize different syllables in human speech. (Mahmoudzadeh et al., 2013)

Phonological Sensitivity or Phonological Representation?

- A child saying "It's hard for me to rememerize."
- Young child saying "I wike da wed one."
- A child asking "Is Grandpa abailavle?"
- Wanting to turn the TV channel and asking for the "marote"
- A child saying "one, two, free, four

A Closer Look at Blending and Segmenting

Synthesis – Blending (putting together)
- Phoneme synthesis is needed for phonic decoding.

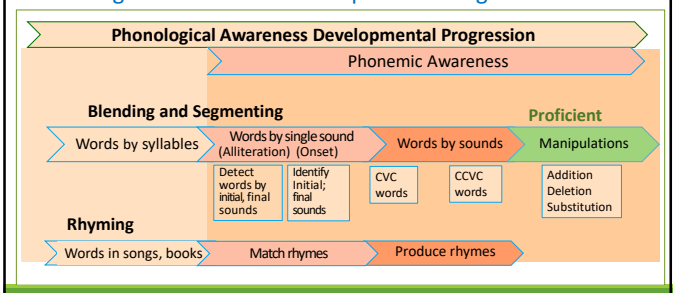
Analysis – Segmenting (isolating, identifying/classifying)
- Phoneme analysis is needed for orthographic learning (spelling and rapid sight word recognition)

Progression of Phonological Awareness Skills

Early PA	Toddler to preschooler	Segmenting and blending syllables
		Rhyme detection
Basic PA	Preschool to 1st grade	Segmenting and blending initial and individual phonemes
		Rhyme production
Complex PA	1st grade and beyond	Adding, deleting, substituting, and reversing word segments

(Adapted from Kilpatrick, 2015)

Phonological Awareness Developmental Progression

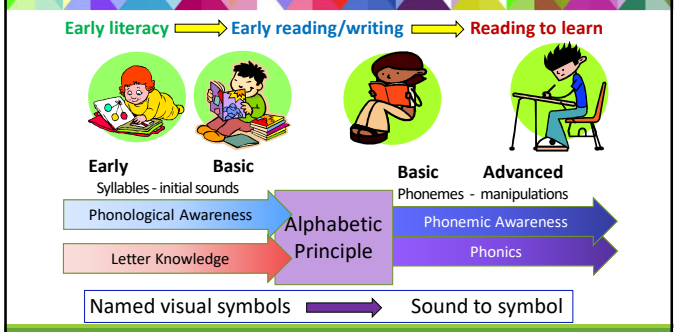


(Adapted from LETRS EC, Paulson & Moats 2018)

Timeline of Literacy Development

Pre-alphabetic	Early Alphabetic	Later Alphabetic	Consolidated
• Sound and language processing • Visual processing	• Phonological processing • Letter recognition writing	• Letter/sound mapping • Reading/ writing simple words • Reading connected text	• Reading complex text • Writing compositions

(Ehri, 2014)



Precursors of Dyslexia in Early Literacy

Deficits in:

- Phonological awareness,
- Rapid automatized naming,
- Verbal working memory,
- Letter knowledge, and
- Oral language/vocabulary

across languages

have been shown to be robust precursors of dyslexia in children as young as age three and into kindergarten.

(Al Otaiba & Fuchs 2006; de jong & van der Leij, 1999; Georgiou & Parrila, 2008; Puolakanaho et al., 2007 Schatschneider et al., 2004; Wanzek & Vaughn, 2007)

"Early Identification of Reading Disabilities: Within an RTI Framework"

A screening battery in kindergarten of:

- **Letter name fluency**
- **Phonemic awareness (sound matching)**
- **Rapid Naming**
- **Nonword repetition**

Accurately identified good and poor readers at the end of 1st grade.

(Catts, Nielsen, Bridges, Liu, & Bontempo, 2015)

Screener Indicators

- **Letter name fluency**
- **Phonemic awareness**
- **Rapid Naming**
- **Nonword repetition**

Instruction Targets

- **Letter names?**
- **Phonemic awareness?**
- **Rapid Naming?**
- **Nonword repetition?**

Predicting Later Reading Development

TWO strong predictors of reading achievement in early kindergarten for 2nd grade literacy learning are:

- ☑ **Phoneme awareness (sound isolation)**
- ☑ **Letter name knowledge**

(National Early Literacy Panel, 2008; National Reading Panel, 2000)

Robust PA Instruction for Every Student

Foundational Skills
- Oral language development
- One-to-one correspondence
- Following directions
- Directionality words/concepts
- Awareness of the production of speech sounds

Preschool

Phonological Awareness:
- Recognize and begin to produce rhyming words
- Blend and segment syllables
- Blend and segment initial sounds

Phonics and Word Recognition:
- Learn letter names and a few sounds
- Recognize familiar signs in environment

Kindergarten

Phonological Awareness:
- Recognize and produce rhyming words
- Blend and segment syllables
- Blend and segment initial and final sounds
- Blend and segment individual phonemes in simple words
- Create new words by manipulating the phonemes in one-syllable words

Phonics and Word Recognition:
- Demonstrate letter-sound knowledge of consonants and short vowel sounds
- Begin decoding CVC words
- Read common high-frequency words

First Grade

Phonological Awareness:
- Count, blend, and segment single-syllable words that include consonant clusters
- Create new words by manipulating individual phonemes in one-syllable words

Phonics and Word Recognition:
- Know the letter-sound correspondence for consonant clusters and digraphs
- Decode words with final–e and vowel teams
- Decode one-syllable words
- Connect syllabification with a vowel sound
- Begin to decode two-syllable words
- Identify root words and simple suffixes
- Read common high-frequency words

Rhyme Routines in Pre-k to Kindergarten

- Rhyme children's names while taking attendance and when dismissing them from circle.
- Change the beginning sound in students' names to create a rhyme (e.g., Terry Berry, Chris Bris, Jaylon Chaylon).

- Use rhyming words while giving directions ("It's time to go to the *bribary*." instead of library).
- Point out words that rhyme in songs and children's books. ("Flopsy and Mopsy rhyme! They sound the same at the end.")

- So many, many more!

Rhyme Routines in Kindergarten to Grade 1

- Change children's names to the sound corresponding to the letter patterns being taught when taking attendance (e.g., Mris, Mavid, Mohn, Mally). (Caveat: Know what your students' names change into before you go there!)
- Use an alphabet chart and the children give a rhyming word as you point to a **consonant** letter (e.g., **rope**: bope, cope, dope, fope, gope, etc.).
- Create a chart using the phonic patterns being taught to create a string of rhyming words and nonwords.
- So many more!

Transition of Early, Basic to Complex PA Skills

Aa Bb Cc Dd
Ee Ff Gg
Hh Ii Jj Kk
Ll Mm Nn Oo Pp
Qq Rr Ss Tt Uu Vv
Ww Xx
Yy Zz

- at	
bat	nat
cat	pat
dat	rat
fat	sat
gat	tat
hat	vat
jat	wat
kat	vat
lat	yat
mat	zat

- ob

Blending/Segmenting Hints

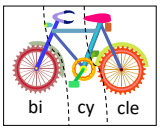
- Use motions or gestures.
- Highlight mouth gesture.
- When segmenting words, say each syllable or sound in one-second intervals. As needed, decrease the time interval to make the task easier, and increase it to make the task more challenging.
- Say the *sounds* in the word and not the letter *names* (e.g., say "/f/–/i/–/sh/," not "*f – i – s – h* " or "/fuh/–/i/– /shuh/").
- Syllables are easier than sounds to identify in words.
- Beginning sounds are easier to isolate than ending sounds; middle sounds are the hardest.
- Consonant blends are more difficult.

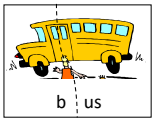
Blending and Segmenting Routines in Pre-k-K

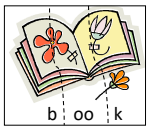
- Segment and blend children's names while taking attendance, first by syllables, then initial sounds, then ending sounds.
- Have children blend and segment say new vocabulary words.
- Use "Ro-bot Re-por-ting" while giving directions.
- Use the balance scale with counters and pictures to compare "which word weighs more" based on the number of syllables.
- Use a Magic Mirror or play "I Spy" for children to blend a segmented word to find an object.
- Play a sorting game to place items together that begin with the same sound.

Blending and Segmenting Routines in Pre-k-K

- Prepare and use picture puzzles to put together and pull apart. Start with syllables, then, initial sound, then individual sounds.
  - Use letters on picture puzzles for pre-k to K.
  - Do NOT use letters for older students. But have them connect letters once they have identified the sounds.







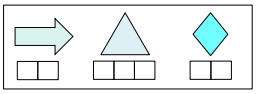
Blending and Segmenting Routines in K-1

- Focus on phonemes in words.
- Use progressively more complex words (CVC then CCVC and CVCC) to blend and segment.
- Sort pictures into groups based on initial sound, final sound, words with the same number of sounds.
- Make phonemic connections to letter patterns.
- So many more!

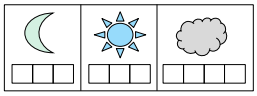
Transition of Early, Basic to Complex PA Skills

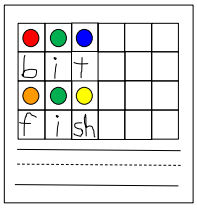
Elkonin Boxes

Syllables



Phonemes



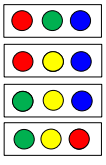


Written Words

Say-it-Tap-it-Write-it

Word Chain Activity

"Make *tap*"
"Change *tap* to *top*"
"Change *top* to *hop*"
"Change *hop* to *hot*"



Blending and Segmenting in Grade 1 and Beyond

- If students have not established well-developed basic phonemic awareness skills, they should receive a comprehensive phonological processing assessment to determine areas of need.
- If phonemic awareness skills are underdeveloped, activities should NOT include letters. Establish phonemic awareness accuracy and automaticity – then connect to letter patterns.

Complex Phonological Awareness Skills

- **Deletion:** Remove a syllable or phoneme from a word.
  calculator → calculate *talked* → talk
- **Addition:** Add a syllable or phoneme to a word.
  fix → affix *top* → stop
- **Substitution:** Switch a phoneme in a word.
  Change *take* to bake Change *bake* to bale
- **Reversal:** switch initial and end consonant sounds in a word
  pat → tap

Syllable deletion can connect to morpheme awareness.

Rapid and automatic to achieve phoneme proficiency

Rhyming Activity Accommodations

What to do when a child . . .

- Isn't able to match words that rhyme?
- Can't provide a word that rhymes?

- Intentionally point out words that rhyme often
- Imitation
- Provide a choice
- Use mouth cues
- Use listening devices

What to do when a child . . .

- Can match words that rhyme?
- Is able to provide a word that rhymes?

- Go to the next level
- Provide several words that rhyme

Blending/Segmenting Activity Accommodations

- How might you make a task easier?
  - Imitation
  - Physical assist with motion
  - Provide a choice
  - Use mouth cues
  - Use listening devices
- How might you make a task challenging?
  - Go to the next linguistic level and/or PA skill

Foundational Skills Needed for Orthographic Mapping for Remembering Words

- Oral language development
- Phoneme segmentation and blending
- Proficient grapheme-phoneme correspondences
- Proficient phonemic awareness (Manipulation tasks)

Questions
Comments
Discussion

Contact Information
Lucy Hart Paulson, Ed.D, CCC-SLP
lucy.hartpaulson@gmail.com