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**Developing Phonological Awareness  
in Preschool Children:  
The Why and The How**

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Disclosure: Receive financial benefit for PASS

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**What Is Phonological Awareness?  
(PA)**

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- A term used to describe a group of oral language skills that reflect explicit knowledge and ability to manipulate the sound structure of language.
- Includes rhyming, alliteration, counting, isolating, segmenting, deleting, substituting, reversing
- It is a higher-order language skill, one of the “meta” linguistic skills

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**Metalinguistics**

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- Ability to think about language independent of the meaning it conveys.
- Phonological awareness (PA) is a metaphonological skill.
- Requires ability to reflect on the **sound** properties of language.

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### Phonemic Awareness (pa)

- Knowledge that words are made up of individual sounds.
- Ability to manipulate these *individual* sounds at the level of the phoneme.
- Most difficult level of PA, **AND** the PA skill most directly related to early reading and spelling abilities of children.
- Of all the PA and pa skills, **sound deletion** is the most robust predictor of early reading success.

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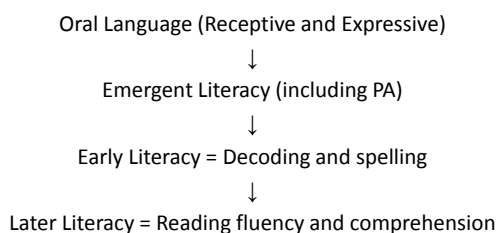
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### Developmental Continuum of Literacy




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### Why Is PA Important to Literacy Achievement?

- Children who perform well on PA/pa tasks usually are (or become) good readers.
- Children who perform poorly on them struggle (or will struggle) with word recognition and spelling.
- Phonological awareness acumen in K is best predictor of reading & spelling achievement in Grades 1 & 2.
- Children who are phonemically aware can grasp the **alphabetic principle**:
  - ▶ Concept that letters (more or less) correspond to sounds in spoken words.

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### But There's More...

- ▶ Children cannot learn to decode until they learn the **alphabetic principle (AP)**...even children with good pa skills---
- ▶ So pa is necessary but not sufficient for good beginning reading & spelling development

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- ▶ Children's early decoding and spelling experiences further develop their phonemic awareness skill, and round and round it goes...RECIPROCAL Relationship
- ▶ About 20% of children do not acquire PA without explicit instruction, especially those
  - ☐ with disabilities
  - ☐ from low-income households
  - ☐ from homes in which English is not a native language

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### How Does Phonological Awareness Develop?

- Reciting finger plays (e.g., Itsy-Bitsy Spider) and nursery rhymes (e.g., Hey Diddle-Didle)
- Singing songs, chants with rhyming or alliterative schemes
- Joint book reading with older children and adults
- Exposure to environmental print (e.g., street signs, restaurant logos)
- Interaction with various forms of print (e.g., menus, recipes, shopping lists, viewing guides)

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### Order of Development of Phonological Awareness Abilities

- Rhyming & Alliteration: (emergent & early PA)
- Blending: combining language parts
- Segmenting: dividing language parts
  - Isolation & Identification: "What's the first sound in the word 'fish'?"
  - Deletion: "Say cupcake. Now, say it without 'cup'"; "Say 'fat' without the 'f.'"
- Manipulation: "Say 'able.' Now add a /t/ at the beginning"; "Say 'top.' Change the /t/ to a /m/."

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### This Sequence of Development...

- Shows children's growing ability to deal with language at a more abstract level & deeper level that is more focused on language structure than on communication.
- Typically developing (TD) children between 4 and 6 years can count, isolate, blend, and segment speech sounds; older children can delete and manipulate them.

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### PA Can Be Taught

- **Explicit instruction in PA often is beneficial for improving:**
  - Metaphonological competence
  - Grapho-phonemic knowledge (alphabetic principle)
  - Decoding ability
  - Spelling proficiency

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### Guidelines for Instruction

#### Control task dimensions that affect performance

##### Phoneme Characteristics/Sound Choice

- Continuants (/s/, /m/) are longer in duration and more discrete than non-continuants (/p/, /k/).
- Can be produced in isolation and emphasized by over-articulation.
- Then move to non-continuant sounds, using initial iteration: *k-k-kite*.

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### Control for Task Difficulty

#### Explicitness of Awareness Required

- Matching
- Judgment: (same/different)
- Isolation
- Elimination: (oddity/deletion)
- Simple Production (1-step tasks; e.g., complete segmentation or blending of units)
- Compound Production (2-step tasks involving deletion, substitution, or reversal)

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### Size of Phonological Unit

#### Move From Larger Units to Smaller Units

Sentences  
↓  
Compound Words  
↓  
Multi-syllabic words  
↓  
Single-syllable words

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## Depth of Phonological Detail

### WORD LEVEL

Compound Word Level  
(e.g., *cupcake*; *hotdog*)

1. Concrete; each syllable is a word.
2. Each syllable can be produced with about equal stress.
3. Compound words are easier than two-syllable words:  
*jacket*, *cookie*.

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## MULTI-SYLLABIC WORD LEVEL

1. Begin with 2-syllable words: (*cookie*; *jacket*).
2. Move to 3-syllable words: (*telephone*; *banana*).
3. Introduce 1-syllable words: (*c-a-t*)

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## SINGLE-SYLLABLE LEVEL

1. CV & VC--continuants (e.g., *no*; *us*)
2. CV & VC--stops (e.g., *two*; *up*)
3. CVC--continuants (e.g., *moon*; *fish*)
4. CVC--stops (e.g., *cat*; *dip*)

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### Position of Unit

#### General Teaching Progression

Initial sounds → Final → Medial/Middle

- It is easier for children to segment initial phonemes of a word than final phonemes (e.g., “sh--ark” vs. “bir--d”)
- Conversely, in blending, it is easier for children to blend final consonant onto a CV string (e.g., “bee--t”) than blending initial consonant onto a VC string (e.g., “s--oup”)

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### Word Frequency/Familiarity

- Use familiar words
- Use high frequency words

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### Use Instructional Scaffolds to Foster Success

1. Make sounds perceptually salient through exaggerated pronunciation
2. Use distinct pauses (1 sec) between words or sound parts
3. Use manipulatives whenever possible
4. Incorporate movement and motor activities
5. Use visual cues: blocks, tokens, bingo chips, pictures

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### Use Instructional Scaffolds to Foster Success

6. Use articulatory cues: "See how they look when I make the sounds: /p/ versus /s/"
7. Model extensively
8. Bombard students with examples of target units
9. Provide immediate corrective feedback
10. Use **repeated instruction** on same target skill: Redundancy builds and solidifies skills

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### Use Instructional Scaffolds to Foster Success

11. Train to mastery criterion
  12. Couple PA training with **alphabetic principle instruction** (either sequentially or concurrently)
- Provide LOTS of **opportunities for practice**
- Skills that are not practiced tend to fade and disappear!

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### Promoting Awareness of Speech Sounds (*PASS*)

(Roth, Worthington & Troia, 2012)

- Developed specifically for preschool children with and without speech and language disabilities.
- Rationale: These youngsters may not show developmental readiness for PA/pa instruction BUT they NEED this knowledge and skill set if they are going to attain literacy.
- **PASS** has 3 main instructional units:
  - ☐ Rhyming
  - ☐ Blending
  - ☐ Segmentation
- **PASS** aligns with standards-based curricula

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### Characteristics of *PASS* Instruction

► All Lessons = 30 Minutes and Have Same Structure

- Opening Activity (5 minutes)
- Explicit instruction (20 minutes)
- Closing Activity (5 minutes)

► All lessons are metascritped (loose scripts)

► All lessons:

- Sequentially ordered discrete learning objectives
- Guided practice opportunities
- Ongoing progress monitoring (probes)
- Criterion-based (suggested 80% accuracy 2 lessons)

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### *PASS* Stimulus Characteristics and Scaffolding Procedures

- High frequency words (20 per lesson) are used for the explicit instruction portion of each lesson
- Picture stimuli named by or for child(ren)
- Extensive modeling of task demands
- Exaggerated articulation of key sound properties and iteration
- Visual cues and manipulatives
- Immediate feedback and error correction

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### Research on *PASS*

**6 studies were conducted over an 11 year time period:**

- In clinical setting
- In school setting
- With children with SLI
- With at-risk preschool children (e.g., poverty)
- With ELL children (in progress)
- 1-on-1 instruction
- In RTI model (Tier 2 support)

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### Research Findings on *PASS*

1. In each setting and for each instructional unit (R, B, S), significant gains were made by the children.
2. These gains also were seen on independent measures of emergent literacy (*PASS* probes; *Preschool Literacy Scale*).
3. The gains were significantly higher than gains made by TD peers with "usual" sound awareness instruction.
4. The effect sizes were large, generally in the .90 range.
5. Preliminary findings with preschool ELLs show that *PASS* is similarly effective as a Tier 2 intervention.

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### Considerations and Cautions

- Evidence suggests that even *preschoolers* can be taught to R, B, S at the pa level.
- Blending instruction by itself did not have concurrent impact on reading achievement unless children already knew how to segment.
- Spontaneous transfer between skills cannot be assumed.
- Phonemic awareness training has to be coupled with AP instruction to have the most impact on literacy (either sequentially or concurrently)
- Phoneme preservation scoring appears to be more sensitive to growth (# of phonemes preserved)

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### THANK YOU!

Froma P. Roth  
[froth@asha.org](mailto:froth@asha.org)

#### *Promoting Awareness of Speech Sounds (PASS)*

Attainment Company  
 Vernona, WI  
[www.attainmentcompany.com](http://www.attainmentcompany.com)  
 1-800-327-4269

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<http://www.speechpathology.com/general/2014-nancy-mckinley-lecture-series>

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| <b>Tues 10/7</b> | <b>Private Practice Serving Ages 3-6</b><br>Rebecca Jarzynski, M.S., CCC-SLP  |
| <b>Wed 10/7</b>  | <b>Developing Phonological Awareness in Preschool Children: Why and How</b><br>Froma Roth, Ph.D., CCC-SLP           |
| <b>Thur 10/7</b> | <b>Play-based Activities for Phonological Development</b><br>Rae Cuda, M.A., CCC-SLP & Sarah Willard, M.S., CCC-SLP |
| <b>Fri 10/7</b>  | <b>Mobile Device (iPad®) Applications to Support Ages 3-6</b><br>Angela Sterling-Orth, M.S., CCC-SLP                |