Objectives:

- Introduction to Ehri’s Phases of Reading Development
- Explanation and practice of phonological continuum
- Understanding the articulatory features of the speech sounds in English
- Connecting the phases of reading and the production of speech sounds to building a sound wall
- Considering graphemes and patterns in the English language represented by our phonemes
- Building a sound wall by using our understanding of mapping speech to print

The Reading Brain
What does it take to retain words?

1. Need _____________________________ - segmenting and blending along with _____________________________

2. Need to know major __________________________ correspondences

3. Need to know __________________________ sound-spelling patterns

4. Need to be able to read _____________________________ words
   ___________________________________________________________________________

  o Self-teaching hypothesis (Share, 1995)
<table>
<thead>
<tr>
<th>Ehri’s Phases of Word Reading Development (Ehri, 1999)</th>
<th>Kilpatrick’s Levels of Reading (Kilpatrick, 2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Pre-Alphabetic</strong></td>
<td></td>
</tr>
<tr>
<td>• Before letter knowledge has developed</td>
<td></td>
</tr>
<tr>
<td>• General knowledge of print is developing</td>
<td></td>
</tr>
<tr>
<td><strong>2. Early Alphabetic</strong></td>
<td>Early Phonological</td>
</tr>
<tr>
<td>• Letter names and some letter sounds</td>
<td>Rhyming, alliteration, syllable segmentation,</td>
</tr>
<tr>
<td>• Requires simple phonology to learn sounds</td>
<td>first-sound awareness</td>
</tr>
<tr>
<td><strong>3. Later Alphabetic</strong></td>
<td>Basic Phonemic Awareness</td>
</tr>
<tr>
<td>• Phoneme grapheme mapping / phonic decoding</td>
<td>Segmenting of 3-4 phoneme words</td>
</tr>
<tr>
<td>• Start of automatic sight word recognition (for regular and a few irregular)</td>
<td>Blending of 3-4 phoneme words</td>
</tr>
<tr>
<td><strong>4. Consolidated Alphabetic</strong></td>
<td>Advanced Phonemic awareness</td>
</tr>
<tr>
<td>• Uses larger units to read sight words</td>
<td>Phoneme deletion, substitution, and reversal of phonemes</td>
</tr>
<tr>
<td>• Orthographic mapping - Requires letter-sound skills and advanced phonological skills</td>
<td></td>
</tr>
</tbody>
</table>

**Phonological Skills - Instructional Implications**

**ACTIVITY:** Answer the following questions in your peer learning groups or quietly by yourself.

- At what grade levels do we teach PA well?
- When do we stop assessing PA skills?
- What happens in 2nd – 5th grade?
- What do our intervention programs do?

**Implications for weak readers**

- Phonological skills are essential for all levels of word reading development
- Assuming adequate effort and opportunity, the phonological core deficit is the primary cause of word—reading difficulties
- Phonemic awareness skills are underrated (Kilpatrick, 2016)
- Students are inadequately assessed beyond 1st grade
The Importance of Phoneme Awareness and Letter Recognition

Phoneme awareness and letter recognition are precursors to teaching the spelling patterns of the English language. Below is a simplified continuum of phonological awareness. In order for students to move through the phases of reading development successfully, it is important for them to learn about the sounds (phonemes) to blend, segment and manipulate these sounds along with recognizing letters to the point of being able to write a letter when asked to, “write the letter p”. Automaticity of sounds and print enables a child to transition into understanding the concept that many sounds, especially vowels, are represented by more than one letter, or a grapheme, a letter or group of letters that represents a phoneme.

** Predictive indicators of later literacy skills. If students can blend and segment phonemes, they will more likely be able to decode and spell words. Students beyond 3rd grade who are struggling readers typically have not mastered the top step of the continuum. It is important to provide instruction with manipulation tasks until they have developed the awareness necessary to become more proficient readers.
Two BIG questions
1) How does a familiar word become a sight word?

2) Why do poor readers have limited sight vocabularies?

Take a few seconds to talk with a neighbor about the answers.

When Sight Word Vocabularies Do Not Grow
“When students require more exposures before they learn a given word, that suggests that their sight vocabularies will grow very slowly.”

Reading Words from Memory; Orthographic Mapping
Phoneme segmentation through manipulation
Distinguishing the smallest units of sound
Grapheme-Phoneme mapping
Know the letters or groups of letters, graphemes, which represent the sound units of the writing system
Word Meaning
Need to bond spelling-sound connections to meaning in memory

Orthographic Mapping
o When a student’s orthographic mapping skills improve, sight vocabulary grows.
o This leads to improvements in reading fluency and reading comprehension.
o Orthographic mapping is critical to reading fluency and comprehension.
Phonological Awareness

Moving from easy to more difficult. Start at the bottom step of the continuum. Do not jump around with these skills.

Word Play with Compound Words:
- The appropriate developmental sequence for manipulating compound words is ____________, ____________, and ____________. (note: deletion tasks may be difficult for many preschoolers).

Syllables: Blending and segmenting Syllables
** In this part of the workshop, we show you some techniques for teaching students how to identify syllables. You can also use pictures to teach an awareness of syllables. Cut the pictures apart by number of syllables.

Syllables: Blending and segmenting Syllables
- Students should be able to ____________ and ____________ syllables.
- Use ____________ ____________ to feel the syllables.

You Do It!!: Breaking into Syllables:
1. Use DUCK LIPS to feel the syllables
2. Show the number of syllables using felt/foam/paper rectangles/syllable board/index cards
3. Fist Stomp the syllables.
** Start with 1-2 syllables and work up to 4-5 syllables.

Syllable Board

| o tiger   |
| o rooster |
| o crocodile |
| o octopus |
| o flower  |
| o dinosaur |

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Onset and Rime (not Rhyme)
• ___________________ the part of the word before the vowel.
• ___________________ the part of the word including the vowel and everything after it.

bath /b/ /ath/  
shirt /sh/ /irt/  
oak ---- /oak/

Blend Onset and Rime
▶ Break one syllable real or nonsense words into the part before the vowel and the rest of the word:
▶ made =
▶ boat =
▶ rack =
▶ shine =
▶ bike =
▶ Ask children to blend the parts to make a word.
▶ Use one small square and one rectangle to represent the parts.
▶ If students have difficulty, choose a word that starts with a continuant, then move the first part toward the second part when blending the parts.

Multi-Sensory
1. Use a felt/paper/foam square and rectangle to represent the onset and rime.
   • The square always represents the smaller part of the word.
2. Choose one syllable words
3. Teacher says first (onset) part of word /mmmmmm/ and displays a square.
4. Teacher says second (rime) part of word /ade/ and displays a rectangle.
5. Teacher says /mmmmmm/ while moving square until it touches the rectangle and then say /ade/ making the word “made”.
6. Repeat with students using their manipulatives.

Thumb-Fingers - Partner A & B with Onset-rime
1. Partner A will say the word.
2. Put out your right fist, extend thumb. Partner B, say the first part of the word.
3. Extend your fingers and ask, “What is the rest of the word?”
4. Bring hand back into a fist and have partner B say the word.
5. Switch – Partner B will lead Partner A in the activity.
6. You can also try the activity with the paper square and rectangle.
Onset-Rime Board

Continuants as the onset are easiest for blending

- If students have difficulty blending onset and rime
  - choose a word that starts with a continuant
  - move the first part toward the second part when saying and blending the parts.
  - /m/, /n/, /f/, /s/ are examples of continuants

- If students can’t blend onset and rime, they cannot decode well.
- When we decode, we use the letter sounds and blend them to make a word.
- The student who can’t blend sounds without letters also cannot blend them with letters!

Phonemic Awareness
A phoneme is the smallest part of *spoken language* that makes a difference in the meaning of words.

- Why is Phonemic Awareness important? Because we match sounds to letters when we decode.
- Many Older Struggling Readers Have Difficulty Blending Onset and Rime!! A student who doesn’t understand that a word can be broken into phonemes cannot understand which letters match a sound, because he doesn’t understand the sounds!
Phonemes

Phonemes are the smallest unit of _________ in a word.

<table>
<thead>
<tr>
<th>word</th>
<th>phonemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>mat</td>
<td>/m/ /a/ /t/</td>
</tr>
<tr>
<td>math</td>
<td>/m/ /a/ /th/</td>
</tr>
<tr>
<td>match</td>
<td>/m/ /a/ /ch/</td>
</tr>
</tbody>
</table>

Why Is Understanding Phonemes Important?

A student who doesn’t understand that a word can be broken into phonemes cannot understand which letters match a sound, because he doesn’t understand the sounds!

Continuum for Phonemic Awareness (examples of each are on the next page)

- Isolation
- Identity
- Categorization
- Blending
- Segmentation
- Deletion
- Addition
- Substitution
A Progression of Phonemic Awareness Activities from Easiest to Difficult

1. **Isolation**: Recognize a single sound in a word. Words have a __________, __________ & __________ sound that can be isolated.

2. **Identity**: Identify the same sounds in different words – shark, shack, ship all have the /     / sound.

3. **Categorization**: Recognize the word in a set of three or four words that has the “odd” sound. 
   Given a list of words orally, we can determine the “odd one out”
   
   Tap, tack, pop - “pop” is the “odd one out”

4. **Blending**: Children listen to a sequence of separately spoken phonemes, and then combine the phonemes to form a word.
   
   T: What is /b/ /i/ /g/?
   S: /b//i//g/ is **big**.
   
   Other ways to make this task more multi-sensory.
   - sliding down your arm
   - use blocks, cubes, chips for individual sounds

**Pointers on Blending**
- Move from compounds, to syllables, to onset-rime, to phonemes.
- Begin with continuants; then move to stops.
- Use physical cues—a hand sliding across
- Blend v+c; then cv+c at the phoneme level.

5. **Segmentation**: Children break a word into its separate sounds, saying each sound as they tap out or count it.

   T: What are the sounds in **clap**?
   S: /c//l//a//p/ - 4 sounds. (Use chips or dot a box on a grid to mark the number of phonemes.)

6. **Deletion**: Removing a sound – “Take away the /s/ in “sit” – what’s the word?

7. **Addition**: Adding a sound to a word – “Now add /p/ to /it/ - what’s the word?

8. **Substitution**: Changing a sound in a word to make a new word. “Say cat. Now change /k/ to /r/. What word?
   Say hit. Now change /t/ to /p/. What word?
Teaching Phonological Awareness in Your Curriculum

GOAL: Learn how to teach phonological awareness and apply it to daily instructional practices within curriculums.

Teaching Phonological Skills: General Principles (Moats, 2009)

- Brief (10–15 minutes), distributed, frequent lessons.
- Two to three activities within a lesson.
- Goal is phoneme segmentation/blending by first grade.
- Gradually move through the developmental progression of task difficulty.
- Oral production of sounds and words is critical.
- Model, lead, observe (I do one, we do one, you do one).
- Give immediate, corrective feedback.
- Touch, move, say—multisensory engagement.
- Transition to letters as appropriate.

You Do It!!
Identify the Layers of Phonological Awareness

Assessment

There are screening tools that are free and/or already available in your schools, look and ask for them. Or, look for these:

- Book: Essentials of Assessing, Preventing, and Overcoming Reading Difficulties
  - PAST - Phonological Awareness Screening Test
  - Go to www.wiley.com/gopsyessources -- after you sign in Password: ‘reading2015’
  - PASS - Phonological Awareness Skills Screener
  - CORE PA Screener
  - Pre-Decoding Skills (PreK & K) (ReallyGreatReading.com)
  - Foundational Skills Survey (K) (ReallyGreatReading.com)
  - Universal screeners: DIBELS Next, AIMSweb, PALS
- Some diagnostic tools are the CTOPP, Lindamood-Bell Auditory Conceptualization Test, and Phonological Awareness Test

Summary

- Phonological Awareness instruction is an instructional routine that should happen daily in PreK-3 classrooms.
- Phonological skills are easier than phonemic level skills.
An example of a phonological skill is when we ask children to listen to two words and blend them (e.g. sail..... boat, word? Students: sailboat)

An example of a phonemic awareness skill is when we ask students to identify the last sound in the word cat.

It is important for us as teachers to be aware of what the scope and sequence of PA development, so we can adjust our instruction for students in our class either in whole group or within small group settings.

Reflection: What’s working?

Directions: Turn and talk to your colleagues about how phonological awareness is being taught in your classroom and in your schools.
1. Do you have a curriculum that addresses it daily?
2. Do you have intervention curriculum for children who have not mastered PA?
3. Are you feeling more comfortable with PA after today?
4. Write a bucket list item labeled “how I will change my PA instruction” and answer it. (This will be your exit ticket)

Resources
- Tools 4 Reading www.tools4reading.com
- FCRR.org - Free evidence based PA activities (supplemental to instruction) for K-6 (some could be adapted or used for PreK)
- Road to the Code- Blachman and Tangle
- Free PA interventions: http://www.msreads.org/PDF%20Docs/Phonological_Awareness_7.08.08.pdf
- Michael Heggerty’s work for K-1 whole group PA instruction
- SRA – Phonological and Phonemic Awareness for Early Learners (PreK-1)
- Phoneme Awareness for Young Children by M. J. Adams
- American Speech and Hearing Association’s Phonemic Inventories by language: http://www.asha.org/practice/multicultural/Phono/
Sound Walls and Kid Lips

What is a Sound Wall?
- A sound wall is set up according to the articulation of speech sounds.
- Moving from the front of your mouth to the back of the throat
- Approaching things from a learner viewpoint rather than a teacher viewpoint
- Anchor to teach letter-sound knowledge and articulatory gestures
- Attaching phonemes to orthographic patterns
  - This has everything to do with print

Why Use a Sound Wall?
1. Articulatory gestures help to ________________ phonemes.
2. Attention is focused on the various ________________ and ____________ representing phonemes.

Contrasting Word Walls and Sound Walls

<table>
<thead>
<tr>
<th>Traditional Word Walls</th>
<th>Sound Walls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotes print to speech</td>
<td>Promotes speech to print</td>
</tr>
<tr>
<td>Organized A-Z order</td>
<td>Organized by sounds</td>
</tr>
<tr>
<td>Words are placed under the first letter they start with</td>
<td>Attaches phoneme (sound) to grapheme (letter/letter combination)</td>
</tr>
<tr>
<td>Students have to know something about the spelling of a word to locate it</td>
<td>Views learning from the student perspective</td>
</tr>
<tr>
<td>Can become wall paper</td>
<td>Fosters understanding of our language system</td>
</tr>
<tr>
<td></td>
<td>Tool for teaching and learning</td>
</tr>
</tbody>
</table>

Sound Walls: How to Begin
1. Begin with sounds by teaching the articulation of phonemes.
   - If you currently use a word wall, you are going to have to add more graphemes to match phonemes (44 phonemes)
2. Build a sound wall as you teach the phonemes, and add the graphemes as they are introduced.
   - If you teach Foundation, start with common consonants and short vowels.
3. If you have already introduced graphemes, add the mouth pictures, and review the articulation of each phoneme daily. The key is repetition!
- Discuss the sound each grapheme represents. Use mirrors and pictures to help make connections and build memory traces.

4. Revisit words already posted on a word wall and analyze them by initial sound.
   - Consider moving words if the phoneme match is inaccurate. For example, move “the” to the voiced /th/
   - Discuss specific patterns (graphemes) that are used to represent our phonemes and focus on the spellings (orthography) along with sounds (phonemes).

5. Keep your alphabet strips in place above your board or other area in your room.

6. Do not be confused by thinking only alphabetical order here.

**Kid Lips - Know Your Phonemes**
Articulatory Features of Phonemes

1. **Consonants** - Notice the airflow as you think about these features.
   - Voiced or Unvoiced?

   - Stop or Continuant?

   - Oral, Nasal or Liquid?

What do you do with your tongue, teeth or lips to make the sound?

Where do you make the sound in your mouth?
Consonant Phonemes

Where and how we use our mouths.

<table>
<thead>
<tr>
<th></th>
<th>Lips together</th>
<th>Teeth on lips</th>
<th>Tongue between teeth</th>
<th>Tip of tongue raised</th>
<th>Lips rounded</th>
<th>Back of tongue lifted</th>
<th>Airflow &amp; obstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
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<tr>
<td>Affricates</td>
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<tr>
<td>Glides</td>
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<tr>
<td>Liquids</td>
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</tbody>
</table>

What we do with our breath and our vocal cords.
2. **Vowels**
   Where in the mouth is the sound produced?
   Smile, open, rounded - Front, middle or back of the mouth?

**Vowel Phonemes Chart**

[Introduction of Words for the Sound Wall](#)

1. Introduce words and add them to the wall
2. Focus on phonemes and mapping them to graphemes
3. Practice blending phonemes together to read words, not flashing words on cards.
4. Review all sounds daily (develop a chant or a routine)
5. Review the words on the wall

**Practice Time:**
Let’s add words to the wall we have put up in class today. Practice explaining the phoneme and the articulatory features of the phoneme you are focusing on with each word.

**Reflection:**

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1. What will you take back and try in your classroom?

2. What is a new learning

**Final Thoughts and Thank You!**

Don’t be afraid to begin. Start and work through this with your students and make it a learning experience for everyone.

Keep the focus on the phonemes rather than the letter names.

Email pictures of your Sound Walls so we can post them on our website and Facebook page!