

# Enhancing and Refining the Use of a Sound Wall



Presented by

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# Why Use a Sound Wall?

Attend to articulation - articulatory gestures help make the phonemes concrete

Attend to the various graphemes and patterns representing phonemes

Understanding the sound/spelling system will build decode and encode skills

Mastery of sound/spelling system will lead to fluency

# Focus on Phonemes and Articulation

- **Hearing sounds in words – “ear”**
- **Articulatory gestures – “mouth movements”**
  - Ease of processing favors gestures
- **Sounds are ephemeral and disappear as soon as they are heard**
  - Liberman (1999) suggests articulatory gestures rather than acoustic features represent phonemes in the brain.
- **Mouth positions are tangible and can be felt, viewed in a mirror, and analyzed by learners**
  - (Ehri, 2014)



# Why is this conversation needed?

- **Using data to consider phases of reading development according to Ehri's Phases of Reading Development .**
- **Sound walls are a tool for moving students from early to later alphabetic phase.**

# Reading Acquisition and the Role of Articulation

**We cannot forget...**

Speech

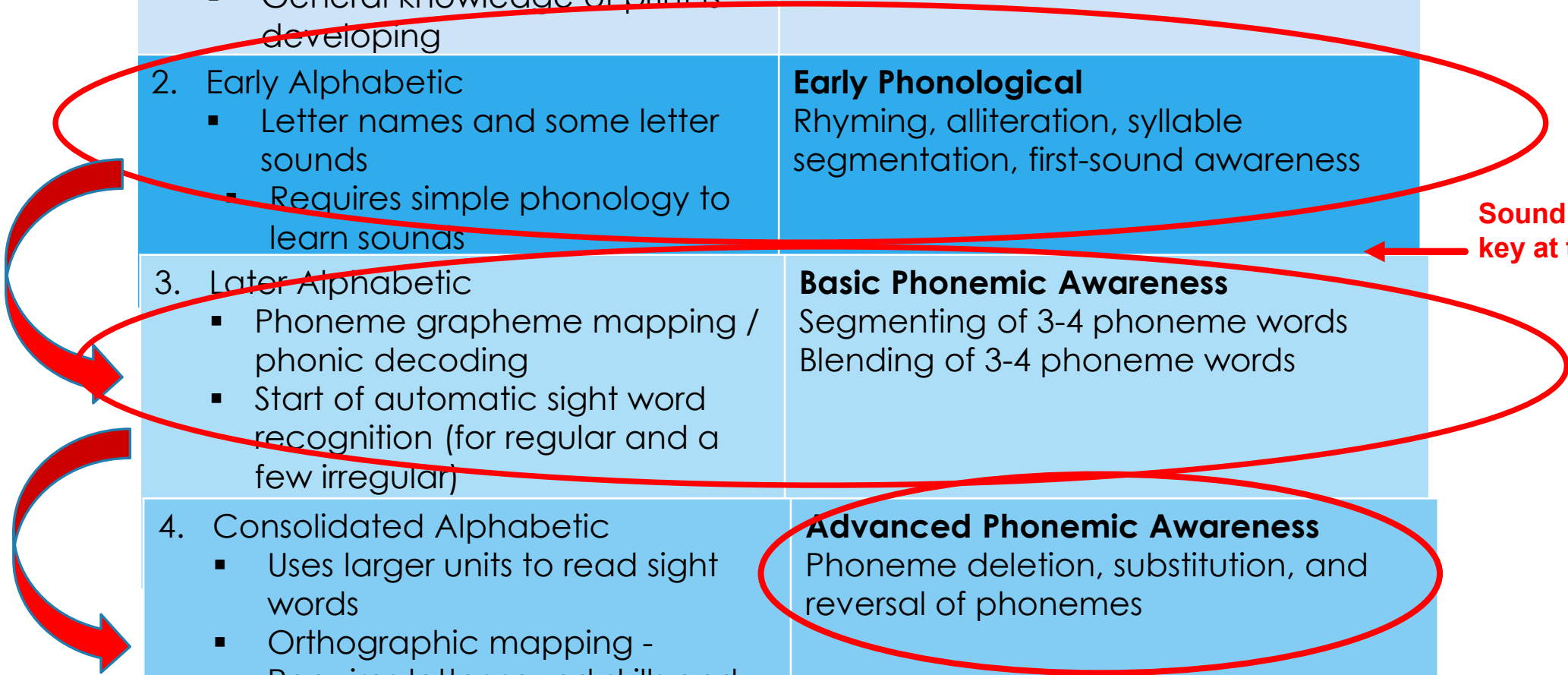


Print

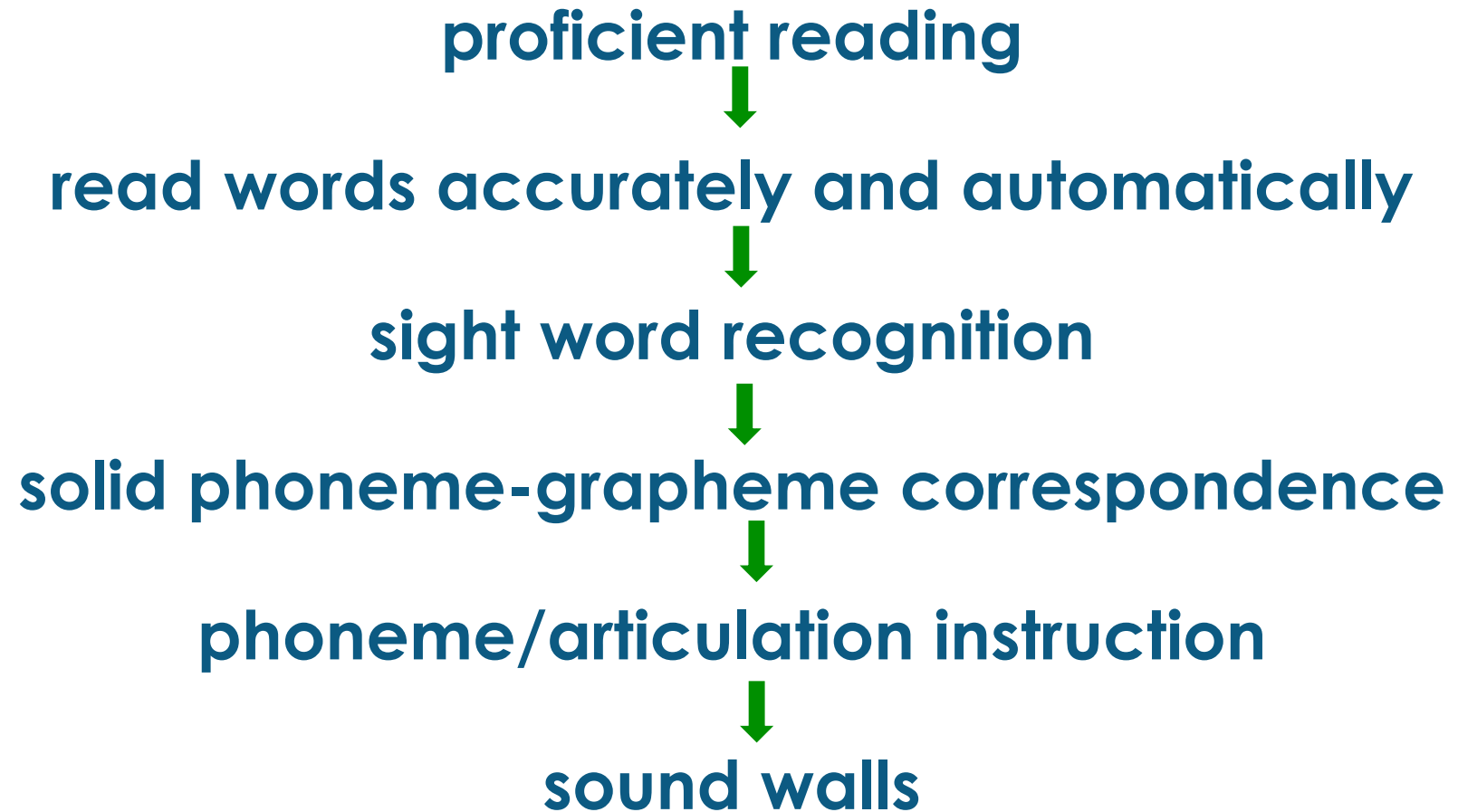
# Who Benefits from Sound Wall Instruction?

- ✓ **Students in the pre-alphabetic and early alphabetic phases of reading will benefit from these types of tasks.**
- ✓ **Build associations linking gestures, keywords, and speech sounds. Emphasize articulation.**

Ehri's Phases of Word Reading Development (Ehri, 2014)	Kilpatrick's Levels of Reading (Kilpatrick, 2015)
1. Pre-Alphabetic <ul style="list-style-type: none"> <li>▪ Before letter knowledge has developed</li> <li>▪ General knowledge of print is developing</li> </ul>	
2. Early Alphabetic <ul style="list-style-type: none"> <li>▪ Letter names and some letter sounds</li> <li>▪ Requires simple phonology to learn sounds</li> </ul>	<b>Early Phonological</b> Rhyming, alliteration, syllable segmentation, first-sound awareness
3. Later Alphabetic <ul style="list-style-type: none"> <li>▪ Phoneme grapheme mapping / phonic decoding</li> <li>▪ Start of automatic sight word recognition (for regular and a few irregular)</li> </ul>	<b>Basic Phonemic Awareness</b> Segmenting of 3-4 phoneme words Blending of 3-4 phoneme words
4. Consolidated Alphabetic <ul style="list-style-type: none"> <li>▪ Uses larger units to read sight words</li> <li>▪ Orthographic mapping - Requires letter-sound skills and advanced phonological skills</li> </ul>	<b>Advanced Phonemic Awareness</b> Phoneme deletion, substitution, and reversal of phonemes



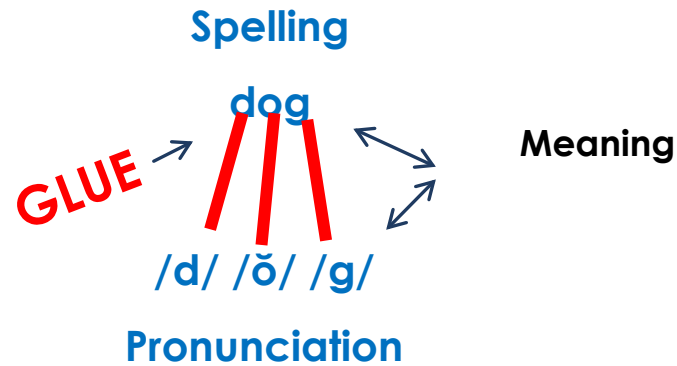
# What is our Goal?





# Reading Words from Memory; Orthographic Mapping

- Process of forming connections



- Knowledge of the grapheme-phoneme system provides the glue bonding spelling-sound connections to meaning in memory

# Why Is This Important?

- “Decoding print is possible only if the reader can map print to speech efficiently; therefore, the elements of speech must be clearly and consciously identified in the reader’s mind.”

■ -Louisa Moats

Partner Turn and Talk

1. This is important because we match sounds to letters when we decode.
2. A student who doesn't understand that a word can be broken into phonemes cannot understand which letters match a sound, because they don't understand the sounds!

# What Is a Sound Wall?

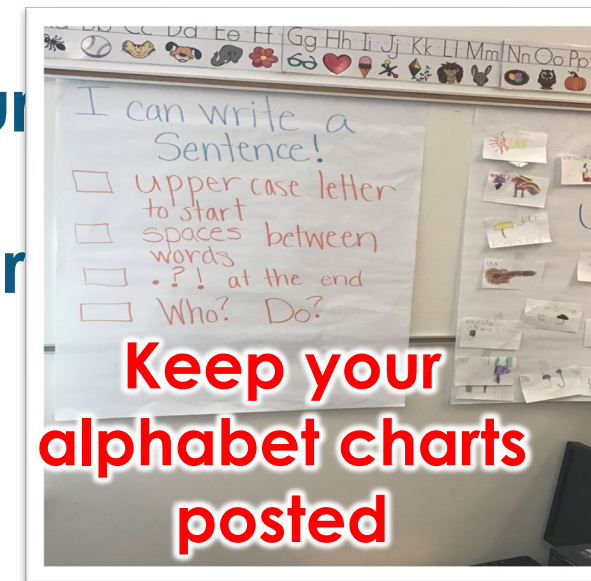
- A sound wall is set up according to the articulation of speech sounds.
- Producing sounds moving from the front of your mouth to the back of the throat
- Approaching things from a learner viewpoint rather than a teacher viewpoint
- An anchor to teach letter – sound knowledge using articulatory gestures
- Attaching phonemes to orthographic patterns
  - This has everything to do with print

# 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 kindergarten, 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.

# Sound Walls: How to Begin, Cont.

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



Handouts page 13-14

# Tear Down Current Word Walls

- The organization is A-Z ...most of the time
- Words are listed by the first letter
- Focus tends to be different in every classroom
- Functions as wall paper
- Where do you tell students to find the word....
- know            the
- write            she
- of                are
- one              I

# 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. This is what differentiates a dyslexic reader from a good reading.
- Phonemic awareness skills are underrated (Kilpatrick, 2016)
- Students are inadequately assessed beyond 1st grade

# Sound Walls



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# Why a Sound Wall? (fill in the blanks)

- Two purposes with a broader application:

1. Attending to articulation

- Articulatory gestures help to concretize phonemes

2. Attention is focused on the various graphemes and patterns representing phonemes.

- Providing access to and discussion around the various ways we spell words (orthography)

# Thinking About How Sounds are Produced

- **CONSONANTS**
- **Labels for the airflow and voicing**
  - Stop – Unvoiced or Voiced
  - Nasal - Voiced
  - Fricative – Unvoiced or Voiced
  - Affricate - Unvoiced or Voiced
  - Glides - Unvoiced or Voiced
  - Liquids - Voiced

# Language System Organized Around Our Speech Sounds - Consonant Phonemes

**Place of Articulation** - Where in the mouth the sound originates

**Manner of Articulation**

What we do with our breath and our vocal cords

		THE CONSONANT CHART						
		PLACE IN MOUTH WHERE PHONEME IS PRODUCED						
		Lips together	Teeth on lip	Tongue between teeth	Tip of tongue raised to bump behind top teeth	Lips rounded tongue pulled back	Back of tongue lifted	Back of Throat
HOW AND WAY PHONEME IS PRODUCED	Stop							
	First Phoneme Unvoiced							
	Second Phoneme Voiced							
	Phonemes	/p/ /b/			/t/ /d/		/k/ /g/	
	Nasal							
	Voiced							
	Phoneme	/m/			/n/		/ŋg/	
	Fricatives							
	First Phoneme Unvoiced							
	Second Phoneme Voiced							
Phonemes		/f/ /v/	/θ/ /ð/	/s/ /z/	/ʃ/ /ʒ/		/h/	
Affricates								
First Phoneme Unvoiced								
Second Phoneme Voiced								
Phonemes					/tʃ/ /dʒ/			
Glides								
First Phoneme Unvoiced								
Second Phoneme Voiced								
Phonemes	/w/ /j/				/y/			
Liquids								
Voiced								
Phonemes				/l/	/r/			

# Pop Quiz: Language System

## What is the Manner of Articulation?

1 – stop

2 – nasal

3 – fricative

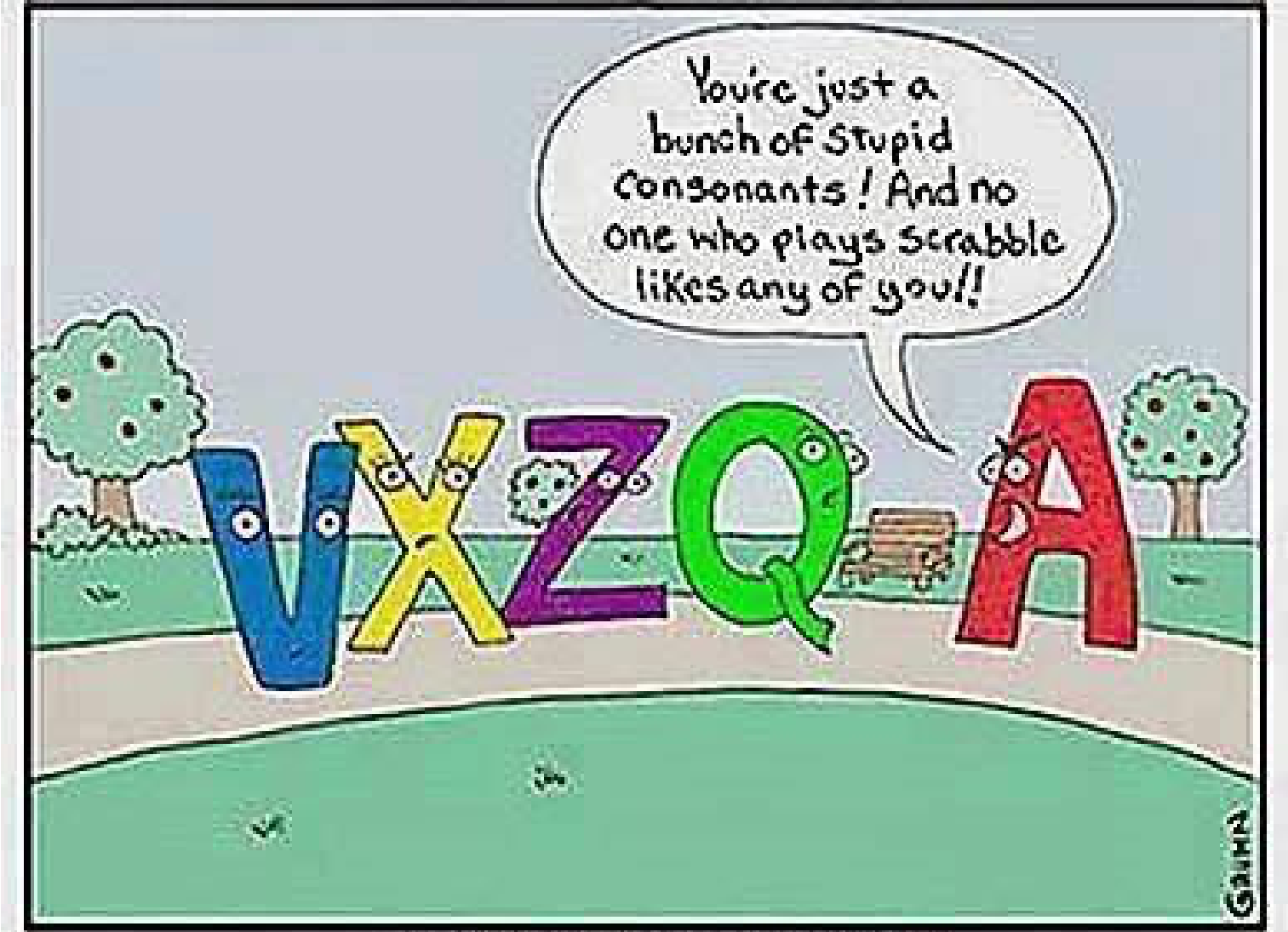
4 – affricate

5 – glide

6 - liquid



# Irritable Vowel Syndrome!



Irritable Vowel Syndrome

# How We Produce Vowel Phonemes

- **VOWELS**
- **Labels for place and what we do with our tongue as we open or round our lips**

Front



Smile

Middle



Open

Back



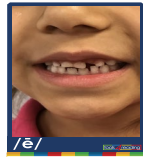
Rounded

- **Where in the mouth is the sound being produced?**
- **Is the tongue high, low, pulled back?**

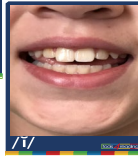
# Vowel Phonemes Chart

## THE VOWEL VALLEY

Begin with a tight smile /ē/.



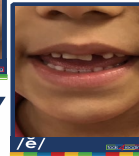
/ē/



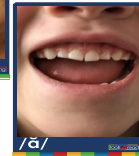
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/ā/



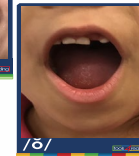
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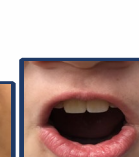
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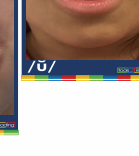
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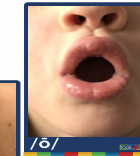
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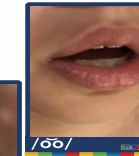
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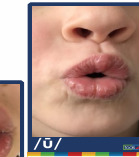
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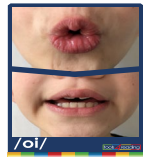


/yū/

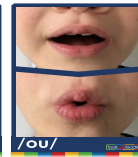
End with puckered lips /ū/ and /yū/.

These are arranged by the slight opening of the mouth.

### DIPHTHONGS



/oi/



/ou/

The most open sound is /ō/, as in the sound we say when the doctor wants to see our tonsils.

These vowel phonemes are referred to as back rounded sounds.



Fromkin, V., Rodman, R., & Hyams, N. (2014). Introduction to Language (10th ed.). Boston, MA: Wadsworth.  
Moats, L.C., & Tolman, C. (2016). Language Essentials for Teachers of Reading and Spelling (3rd ed.). Dallas, TX: Voyager Sopris Learning.

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# Implementing a Sound Wall

## Sound Wall Implementation Guide



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### IMPLEMENTING A SOUND WALL

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A sound wall is a tool to help students connect phonemes to graphemes.

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#### DETERMINE WHERE YOU WILL PUT YOUR SOUND WALL

- Is the location easily accessible for both me and my students?
- Is the location readily available to me when teaching?
- Do I have a large enough space on a wall to place both a consonant and vowel sound wall?
- What materials may I have to use to incorporate a smaller sound wall in my room?
- Will I have to rearrange materials in my classroom that have already been established?

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#### IDENTIFY MATERIALS NEEDED FOR THE SOUND WALL

- Do I have sound cards? Consonants? Vowels?
- How will I lay out my consonant sound wall? Clusters? Horizontal line?
- Do I have labels for the articulation categories?
- Can I form the V for my vowel wall? How might I rearrange materials to create this for scaffolding?
- How am I going to build in articulation supports? Kid Lips?

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#### PLAN FOR TEACHING OF NEW SOUNDS

- Will I place all sound cards on the sound walls prior to teaching the sounds?
- Will I turn over the sound cards until I am ready to teach that phoneme-grapheme connection?
- Do I want to place all sound cards on the wall and cover untaught sounds?

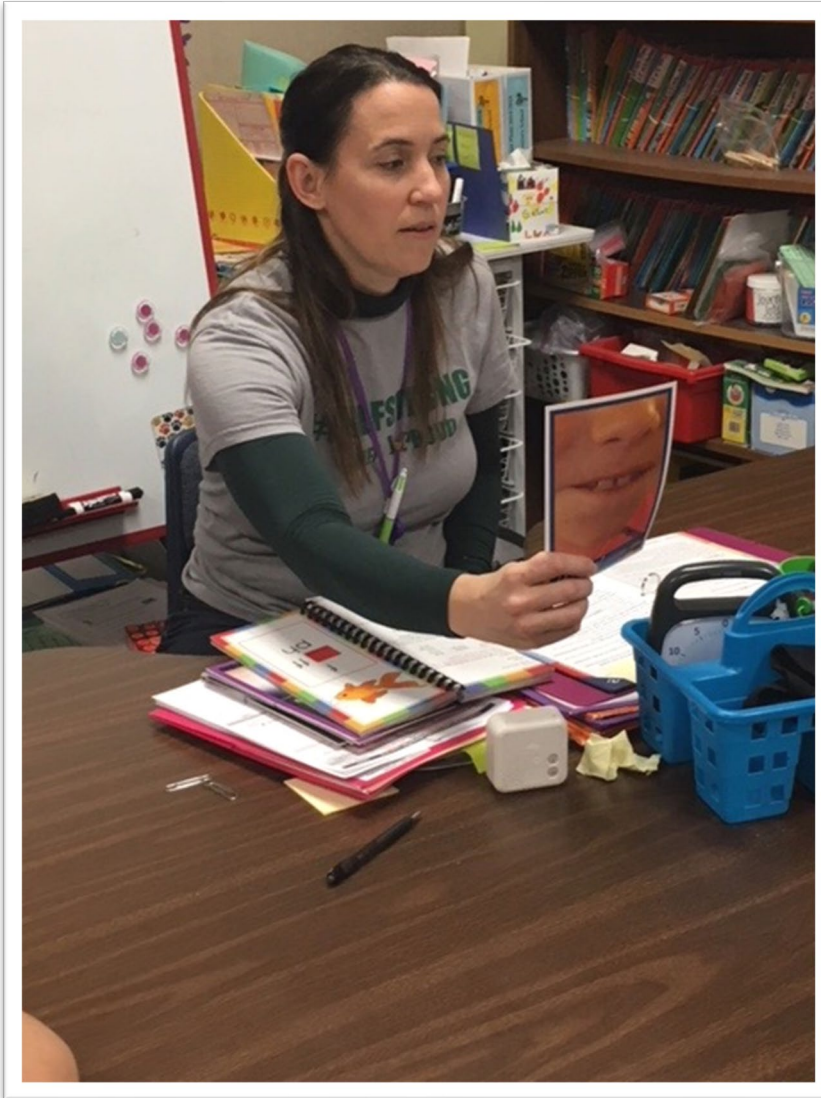
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#### ESTABLISH INSTRUCTIONAL TIME FOR SOUND WALL INSTRUCTION

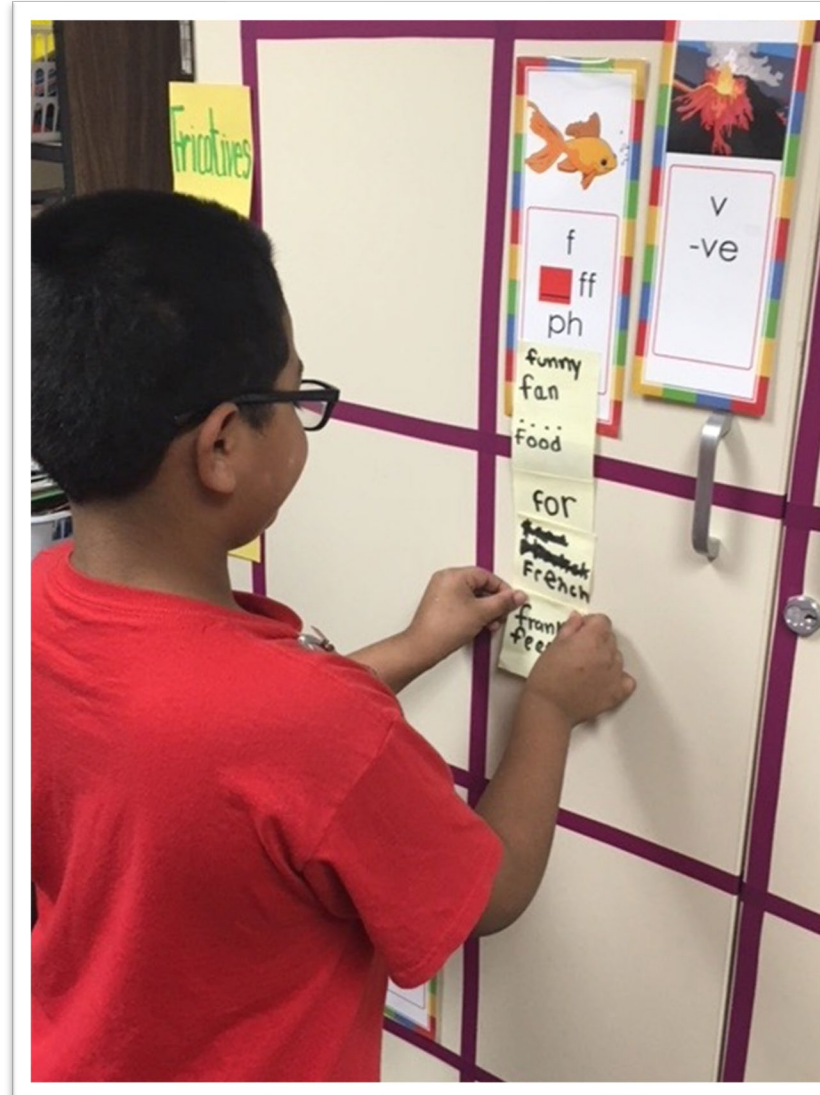
- Can I build in a time during my daily routine for sound wall instruction/review/use?
- How do I intend to introduce new sounds?
- Will the students place the sound cards on the wall or will I?
- Have I established a plan for reviewing sounds on the sound wall? Sporadically throughout the day? A set time during my ELA block? Part of morning routine?



# Explicit Instruction Connecting Phonemes to Graphemes



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# Adding Graphemes to your Sound Wall

- Explicitly teach one concept at a time (this may be through your spelling list)
- When adding a new spelling to go with the sound, you do not have to teach all of the spellings. (Use a sticky note to cover up graphemes that have not been taught.)
- Use mouth pictures to support an existing program
- Practice through application of a specific grapheme linking to a phoneme every time you work with it
  - Phoneme Grapheme Mapping
  - Sorting Words
  - Building Words
  - Word Chaining

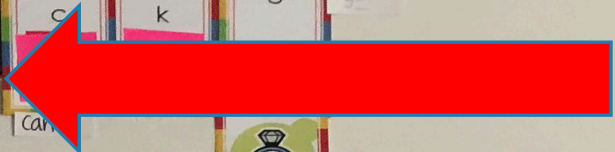
# Crenshaw, AL



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Phonics cards for the first row:

- Card 1: /p/ /b/ (mouth image)
- Card 2: p b (bat image), but big by
- Card 3: /t/ /d/ (mouth image)
- Card 4: t d (turtle and dog images), did
- Card 5: /k/ /g/ (mouth image)
- Card 6: k c g (kite, cat, and garden images), get
- Card 7: /e/ (mouth image)
- Card 8: e \_ e (bear image), e \_ e, ee \_ y, \_ ie
- Card 9: /i/ (mouth image)
- Card 10: i (child image)
- Card 11: /m/ (mouth image)
- Card 12: m my (mouse image)
- Card 13: /n/ (mouth image)
- Card 14: n (nose image)
- Card 15: /ng/ (mouth image)
- Card 16: ng (diamond ring image)



od  
OK

Phonics cards for the second row:

- Card 1: /f/ /v/ (mouth image)
- Card 2: f v (fish and dragon images)
- Card 3: think
- Card 4: th th (hand and family images), the this, they that
- Card 5: /s/ /z/ (mouth image)
- Card 6: s ss z \_ s (snake and zebra images), was as
- Card 7: /sh/ /zh/ (mouth image)
- Card 8: sh (shell and treasure chest images)
- Card 9: /r/ (mouth image)
- Card 10: r (leaf and rabbit images), ran red
- Card 11: /h/ (mouth image)
- Card 12: h \_ had help (horse image)
- Card 13: /ch/ /j/ (mouth image)
- Card 14: ch j (chair and jacket images)

Just Right Books  
 1. Look for books that you might enjoy  
 2. See if you know any of the words  
 3. See if you understand what is about it

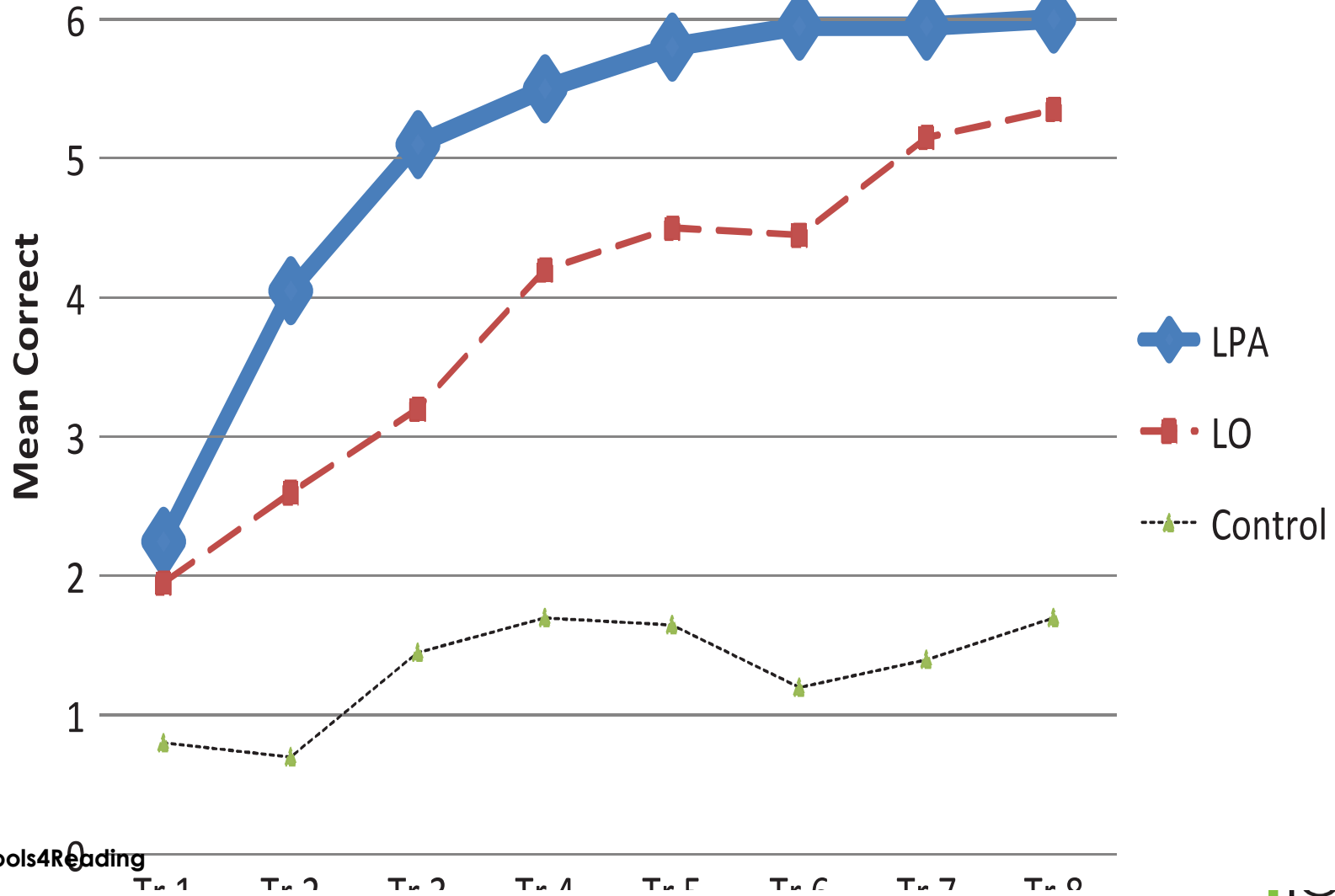
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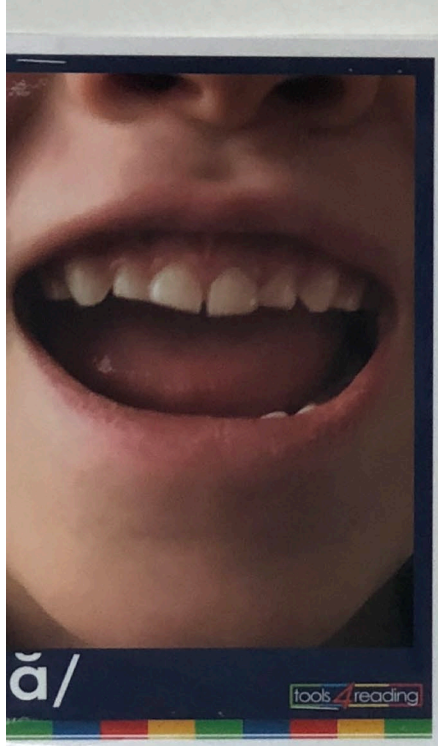
Phonics cards for the third row:

- Card 1: /y/ (mouth image)
- Card 2: y \_ (yo-yo image)
- Card 3: wh \_ (whale image)
- Card 4: w (wheelbarrow image)



# Value of Orthography





a

am

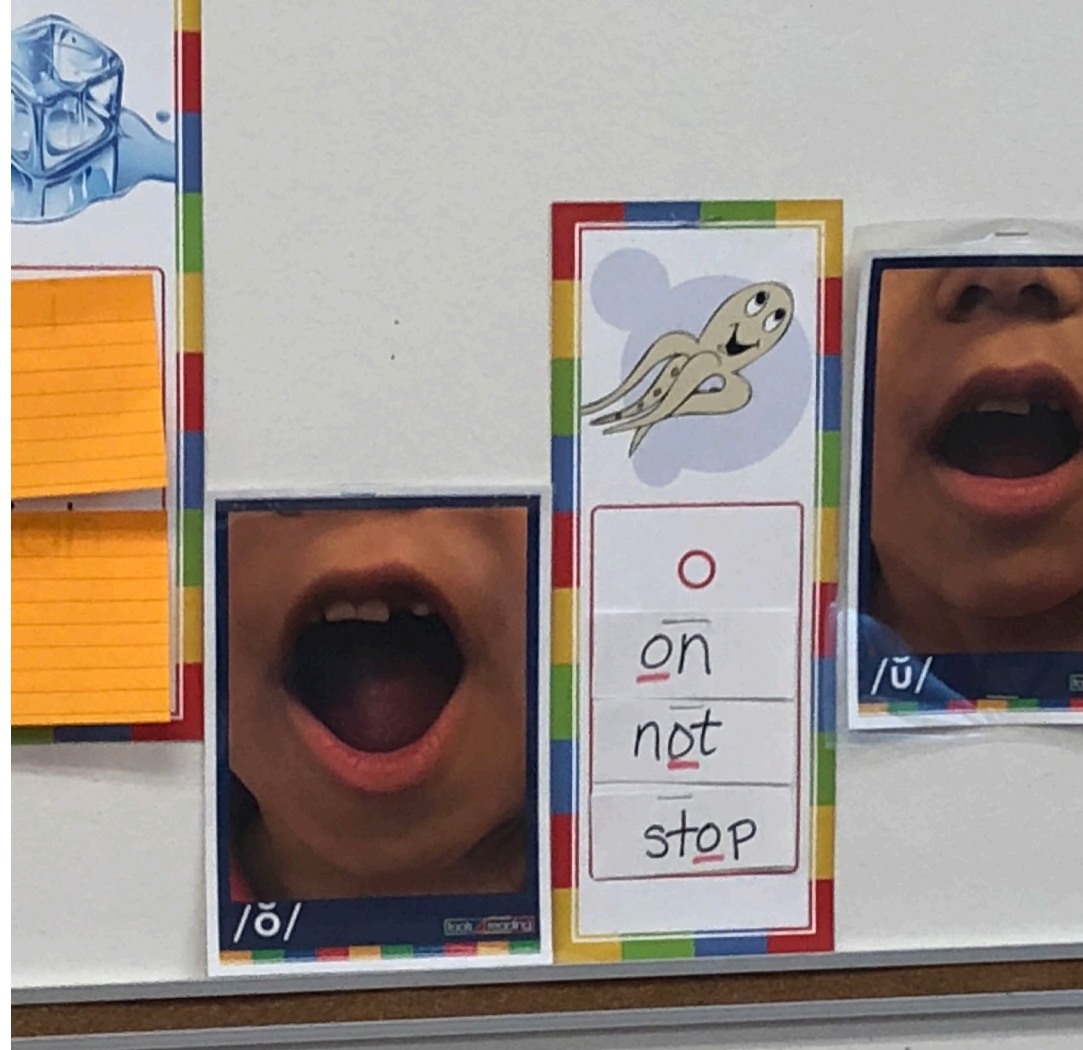
at

an

and

ask





# Introduction of words for the Sound Wall

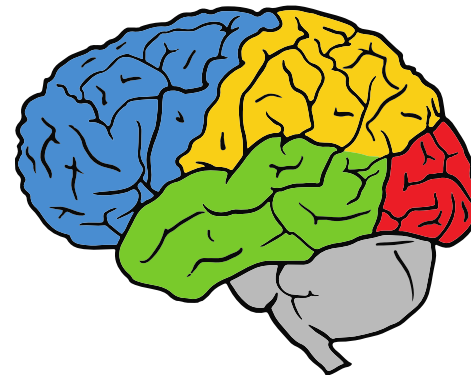
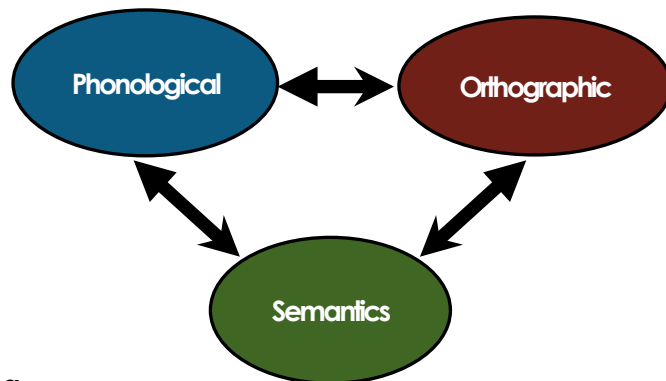
- 1.** Introduce words and add them to the wall
- 2.** Focus on phonemes and mapping them to graphemes
- 3.** Practice blending phonemes together to read words, not flashing words on cards.
- 4.** Review all sounds daily (develop a chant or a routine)
- 5.** Review the words on the wall



# What Does It Take to Retain Sight Words?

(fill in the blanks)

1. Need phonemic analysis – segmenting and blending along with manipulation
2. Need to know major grapheme-phoneme correspondences
3. Need to know syllabic sound-spelling patterns
4. Need to be able to read unfamiliar words on your own
  - Self-teaching hypothesis (Share, 1995)



# Conclusion

- Skills become integrated as acquisition proceeds.
- Phonemic awareness and orthography are used to build vocabulary and lexical quality
- The orthographic mapping processes underlie the emergence of students' skill in reading words accurately and automatically from memory.

**Thank you!**

**Mary Dahlgren**

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