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**Objectives:**

- Review: PA and its role in intervention for struggling readers
- Review: Basic principles of Research on PA
- PA in the Orton-Gillingham lesson
- Considerations/Challenges for Supplementing PA in an OG Training
- Elements of a recently developed Supplemental PA resource for OG Training
- Levels and Activities

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**PA DIFFICULTIES**

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### What we Know from the Research

- 88% of students who struggle in reading have a phonological deficit (Shaywitz, 2005).

Figure 1.3 Reading Rope (Scarborough, 2001)

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### Phonological Awareness Continuum

<b>Rhyme</b> *match word endings Ex. miss, kiss, kiss	<b>Alternation</b> *produce groups of words that begin with the same initial sound Ex. cat, city, crabs	<b>Sentence Segmentation</b> *segment sentences into spoken words Ex. He is late. I I I	<b>Syllable Segmentation</b> *segment words into syllables Ex. far get put	<b>Compound Words</b> *blend and segment spoken words into 2 separate words Ex. rainbow rain, bow	<b>Onsets &amp; Blending &amp; Segmenting</b> *blend and segment the cluster onset (initial component) & the vowel & rime (vowel+consonant) sounds spoken after it Ex. /t/ /p/ /at/ /pat/ /t/	<b>Phonemes Blending &amp; Segmenting</b> *blend phonemes into words, *segment words into individual phonemes and manipulate phonemes to spoken words Ex. /m/ /e/ /t/ /m/ /e/ /t/ /m/ /e/ /t/ /m/ /e/ /t/
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### What we Know from the Research

“(Phoneme awareness) training benefits not only word reading but children’s ability to read and spell for months, if not years, after the training has ended” (NRP, pp.2-40)

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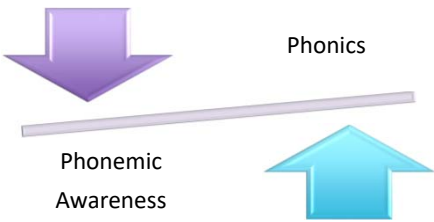
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### What we Know from the Research



Phonics

Phonemic Awareness

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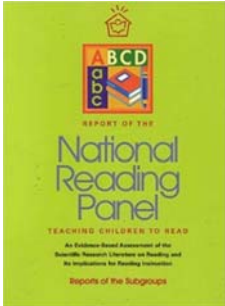
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- 1-2 skills at a time
- Brief focused practice 5-15 minutes
- Blending and Segmenting

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### What do we teach?

“Although phonological sensitivity skills can be taught to young children as part of an extensive phonological awareness program that culminates in phoneme awareness (e.g.,Lundberg, Frost, & Petersen, 1988), it is not clear that doing so improves acquisition of phoneme awareness or is necessary. The phonological sensitivity activities that have been thought by many to be suitable for kindergarten actually are appropriate for preschool”(Brady, 2020, p. 7).

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### Which Skills do we target?

**Yopp (1992)**

**Kindergarten:** phoneme blending, counting phonemes, and phoneme isolation/identification

**Blending:** skill at end of K predicts skill at end of 1<sup>st</sup> grade  
 skill at end of 1<sup>st</sup> grade predicts skill at end of 2<sup>nd</sup> grade  
 no further influence

**Segmenting:** has a reciprocal relationship with reading words from 1<sup>st</sup>- 3<sup>rd</sup> grade

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### Which Skills do we target?

**Manipulation:**

- Kilpatrick (2016)- Manipulation practice is extremely efficient way to learn PA because it encompasses the other PA skills of segmenting, deleting, blending
- Brady (2020) Manipulation skills appears **to be the result of** learning to read because students draw on orthographic knowledge (see p. 15)

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### Orton-Gillingham Lesson

- Warm-Up: PA and/or handwriting practice
- Review
- Drill Section
  - Visual
  - Auditory
  - Blending
- **New- Teach a New Phonics Concept**
- Application:
  - Read Connected Text-blending
  - Cumulative Spelling-segmenting
- Wrap-Up

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### PA in the Orton-Gillingham Lesson

- **Review:** blend and segment
- **Drill Section**
  - Visual:
  - Auditory:
  - **Blending:** blend/manipulate (with graphemes)
- **New-** Teach a New Phonics Concept
  - Read words- blending
  - Spell words- segmenting
- **Application:**
  - Read Connected Text- blending
  - Cumulative Spelling- segmenting
- **Wrap- up**

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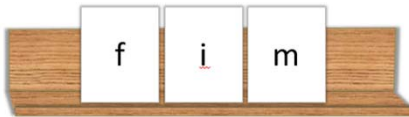
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### Orton-Gillingham and Phonemic Awareness



Blending



Segmenting

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### Do We Need to Add More?



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### Considerations for additional PA Activities

Co-articulation

Phonological Working memory



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### Orton-Gillingham Lesson

- Warm-Up: PA and/or handwriting practice
- Review
- Drill Section
  - Visual
  - Auditory
  - Blending
- New- Teach a New Phonics Concept
- Application:
  - Read Connected Text-blending
  - Cumulative Spelling-segmenting
- Wrap-Up

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### Considerations for Additional PA work in the OG Lesson

- Efficient
- Effective
- Targeted to the need of the Student
- PA **proficiency** (Kilpatrick, 2016).

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### Solution No. 1-Use a Pre-Existing program

Advantages:

- Assessment Tool
- Progression of Skills
- Progression of Scaffolding
- Record Keeping Forms
- Focus on building proficiency/automaticity

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### Challenges of Using a Pre-Existing Program

- Extra/different training
- Disservice to Pre-Existing Program
- Mismatch of delivery/corrective feedback routines

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### Solution No. 2- Design a PA supplemental program

Advantages:

- Provides Structure
- Combines aspects
- Shorten Training
- Change as needed
- Dissertation Topic

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### Challenges

- Time intensive: need to create:
  - Diagnostic inventory
  - Word lists
  - Timing factor/automaticity guidelines
  - Progress Check list
  - Training materials

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### Main Elements of the PA Supplemental Appendix to the OG Training at MSJ

- *Phoneme Level* Activities
- Menu: 2 activities for each targeted need
- PA levels of difficulty
  - External to Internal Phonemes
  - Continuant sounds to Stop Sounds
- 10 Word lists provided for each level
- Guidelines for proficiency of when to move to next level
- Diagnostic Inventory
- Progress Checklist

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### Levels of Difficulty

- Based on: Location of Phoneme
- Difficulty External-→ Internal

**CVC**

First then last: easiest to detect  
Medial= more difficult to detect

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### Progression of Skills



**Partial Alphabetic:**

B

BD or bd

**Later Alphabetic:**

bed

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### Difficulty with PA: 4 Phonemes

- Spelling:

**CCVC or CVCC**

Leaving out the internal phonemes:

Stop-----> sop

Jump-----> jup

Went-----> wet

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### Difficulty with PA: 4 Phonemes

- Reading Errors:

**CCVC or CVCC**

- Nasals (/n/, /m/ /ŋ/)
- Liquids (/l/, /r/)

inserted.....deleted....confused

guild for "guide"      girl for "grill"      fluke for "flunk"

slip for "sip"      frip for "flip"

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### Recommendation from Review of the Research

- Document where students are in the development of phoneme awareness skills
- Gather this information from reading and spelling errors
- select activities that systematically draw attention to the next level needing work

• (Brady, 2020, p. 15)

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**ONE SEQUENCE OF PHONEMIC AWARENESS**  
SIMPLE TO COMPLEX  
EXTERNAL TO INTERNAL PHONEMES

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External Easier than Internal



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### Continuous Easier than Stop

Continuous  $\xrightarrow{\hspace{2cm}}$  Stop/Clipped

Easier to detect phonologically	Harder to detect phonologically
Can be held: i.e. /mmmmmmmmmm/	Cannot be held: i.e. /b/
All vowel sounds!	
Consonant sounds:	Only Consonant Sounds:
/f/, /v/, /m/, /n/, /r/, /s/, /z/, /w/, /y/, /z/	/b/, /k/, /d/, /g/, /h/, /j/, /p/, /t/
/sh/, /th/, /th/(voiced)/ /zh/	First phoneme in "qu" /k/ First phoneme in "x" /k/

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Sequence: External to Internal

**Level 1:**



1. Identification of Phonemes in Single syllable words:
  - a. Initial phoneme
  - b. Final phoneme
  - c. Medial phoneme
2. Blending CVC words
3. Segmenting all sounds in CVC words

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Sequence: External to Internal

**Level 2:**



Beginning Consonant Blends

2a. both sounds are continuous (CC)	
sl	/ssssssssssssssssss/llllllllllllllllll/
fl	/fffffffffffl/llllllllllllllllll/
sm	/ssssssssss/mmmmmmmmm/
sn	/ssssssssss/nnnnnnnnnn/

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Sequence: External to Internal

Level 2:

**ccvc**

Beginning Consonant Blends

2b.	First sound stop, second sound continuous (SC)
bl	/b/   /
cl	/k/   /
gl	/g/   /
pl	/p/   /

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Sequence: External to Internal

Level 2:

**ccvc**

Beginning Consonant Blends

2b.	Only second sound is continuous
br	/b/ /
cr	/k/ /
pr	/p/ /
gr	/g/ /
dr	/d/ /
tr	/t/ /
tw	/t/ /

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Sequence: External to Internal

Level 2:

**ccvc**

Beginning Consonant Blends

2c.	First sound continuous, Second sound stop (CS)
sc/sk	/s/   /k/
sp	/s/   /p/
st	/s/   /t/

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Sequence: External to Internal

Level 3:



Ending Consonant Blends

a.	Internal Continuous Sound
-ft	/fffffffffffffff/t/
-st	/sssssssss/t/
-sk	/sssssssss/k/

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Sequence: External to Internal

Level 3:



Ending Consonant Blends

b.	Internal Nasal Sound
-nd	/nnnnnnnnnn/d/
-nt	/nnnnnnnnnn/t/
-mp	/mmmmmmm/p/

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Sequence: External to Internal

Level 3:



Ending Consonant Blends

c.	Both sounds are stop sounds
-pt	/p/t/
-ct	/k/t/

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Sequence: External to Internal

**Level 4:**  
Beginning AND  
Ending Blends

**CCVC**

**a. 2 phonemes + 2 phonemes**

Slump	flint	spend
Trust	crept	dis-stinct

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Sequence: External to Internal

**Level 5:**  
3 Phoneme  
Beginning Blends

**CCCVC**

	a.	Two Internal Beginning Sounds
str		/sssssss/t/rrrrrrr/
spr		/sssssss/p/rrrrrrr/
spl		/sssssss/p/lllllllll/
str		/sssssss/t/rrrrrrrrr/

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Sequence: External to Internal

**Level 6:**  
Beginning AND  
Ending Blends

**CCCVCC**

**a. 3 phonemes + 2 phonemes**

Scrimp	splint	sprint
Strept	strict	script

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### Target PA Skills of Students

- Be aware of at which level your student struggles by PA inventory and reading/spelling errors
- Provide practice at that level, until the student is automatic
- When a student can't "hear" the phoneme then have the student "feel"/"see" the phoneme (mirror/questioning)

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### ACTIVITIES TO TARGET PA SEGMENTING

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### Stretched Segmenting

I DO



1. T: I'm going to say a word and stretch all of the sounds to help me **hear** all of those sounds.
2. T: "My turn: The word is slug":  
 [stretch slinky slowly as you say each sound in a smooth continuous way without pausing between sounds. Only stretch slinky as wide as shoulders]:  
 /sssssssss/l/l/l/l/l/l/l/l/l/l/l/l/l/l/l/l/l/l/l/uuuuuuuuuu/g
4. T: "slug" [bringing slinky back together]

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### Stretched Segmenting We Do



5. T: Now let's do that same word together. The word is slug. What word?  
 6. S: "slug"  
 7. T: Let's stretch it:

[both stretch slinky slowly as you say each sound in a smooth continuous way without pausing between sounds. Only stretch slinky as wide as shoulders]:

/sssssssss/llllllllllllllllllll/uuuuuuuuuu/g

8. T & S: "slug" [bringing slinky back together]

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### Stretched Segmenting You DO:



9. T: Now do it by yourself. The word is slug. What word?  
 S: "slug"  
 10. nT: "stretch it:"

[watch to make sure student stretches slinky slowly as he/she says each sound in a smooth continuous way without pausing between sounds. Only stretch slinky as wide as shoulders]:

/sssssssss/llllllllllllllllllll/uuuuuuuuuu/g

11. S: "slug" [bringing slinky back together]

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### Stretched Segmenting You Do Continued



Provide additional words at that particular level.

Level 2a: CCVC

Slit flag snack smog Fred

Fleece snub slick freak flown

When the student can do this activity in 2-3 seconds, without errors 90% of the time (9/10 words): move to the Stretched Segmenting activity using Elkonin boxes.

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### Stretch Segmenting with Elkonin Boxes

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### I DO

Stretch Segmenting with Elkonin Boxes

1. Teacher: You have gotten so good at stretching sounds using the slinky.

Now we are going to do the same thing, but this time we are going to slide a token into a box, for each sound we stretch:

2. T: I'll go first. My turn: The word is "flat".

- Teacher moves 1<sup>st</sup> token in WHILE extending the sound /f/
- Does not pause
- Moves the second sound in WHILE extending the sound /l/
- Does not pause
- Moves the third sound in WHILE extending the sound /a/
- Do not pause
- Moves the last sound in /t/

3. Teacher then runs finger from left to right under the boxes and says the whole word together: "flat"

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### We DO

Stretch Segmenting with Elkonin Boxes

1. Teacher: Now let's do that same word again, but this time, we will both do it together. Ready?

2. T: The word is "flat". What word?  
S: Flat

- Teacher and student on their own separate mats: move 1<sup>st</sup> token in WHILE extending the sound /f/
- Do not pause
- Move the second sound in WHILE extending the sound /l/
- Do not pause
- Move the third sound in WHILE extending the sound /a/
- Do not pause
- Move the last sound in /t/

3. Teacher and student both run finger from left to right under the boxes and says the whole word together: "flat"

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### You DO

Stretch Segmenting with Elkonin Boxes

- Teacher: Great! Now I would like for you to do that all by your self.
- T: The word is "flat". What word?  
S: Flat
  - Student moves 1<sup>st</sup> token in WHILE extending the sound /ffffffffffff/
  - Does not pause
  - Moves the second sound in WHILE extending the sound /llllllllllll/
  - Does not pause
  - Moves the third sound in WHILE extending the sound /aaaaaaaaaaaa/
  - Does not pause
  - Moves the last sound in /t/
- Student runs finger from left to right under the boxes and says the whole word together: "flat"

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### You DO Continued

Stretch Segmenting with Elkonin Boxes

- Provide additional words at that particular level.
- Level 2a: **CCVC**
- fleet slim snug smack fret**
- Fled snap slab fruit flume**
- When the student can accurately stretch all sounds within 2-3 seconds, without errors 90% of the time (9/10 words), move to the next level using the easier activity: the slinky.

Teacher: That was wonderful! Now let's practice some more. Remember to hold each sound that you can, and do not stop between the sounds. Keep it smooth.

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## ACTIVITIES TO TARGET PA BLENDING

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### The Mystery Game

For younger children, you can use a puppet



1. Teacher: I'm going to [or Rufus the puppet] is going to say a word in a funny way. Your job is to solve the mystery and the tell me what the word is.
2. /mmmmmm/ooooooooo/p.
3. Student: "mop"!
4. Teacher: /sssssssss/iiiiiiiiiiiiiii/t/
5. Student: "sit" !

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### The Mystery Game Sequence



- Start at the lowest level that the student has difficulty with blending words for reading.
- Choose words from that level.
- Move to the next level when the student is able to respond within 2 seconds with the correct word 9/10 times.

Example words:  
(3 phonemes, starting with a continuous sound)

Sam moon fish nap run zap  
Met lug soon feet vase

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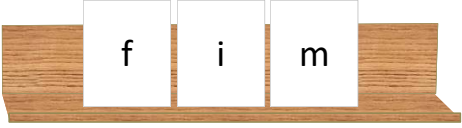
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### Blending: Connected Phonation



/fffffffffffffffffffff/iiiiiiiiiiiiiiiiiiii/mmmmmmmmmm/

NOT

/f/      /i/      /m/




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### ACTIVITIES TO TARGET ADDED/DELETED SOUNDS

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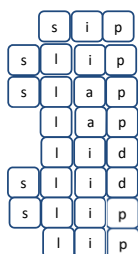
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### Word Chaining



Spell \_\_\_\_\_  
Now change \_\_\_\_\_ to \_\_\_\_\_.

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### Using Articulatory Features



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## Using Articulatory Features



Student writes "sip" for slip.

- Have student stretch sounds slowly
- Look in the mirror
- Ask: what is your mouth doing right after /s/?
- Where is your tongue?
- What sound is that?

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## Summary

- Simple to Complex
- Outside sounds to inside sounds
- Target PA activities to the skill level the student needs



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