

# History

(Henry, 1999)

- ▶ **Plato** (427-347BC) "Where the boy is not yet clever in writing, the masters first draw lines, and then give him the tablet and make him write as the lines direct."
- ► **Horace** (65BC) suggested having child shape pieces of pastry into the shape of letters
- ▶ **Seneca** (3BC-AD65) teacher guides the child's fingers as they trace the letters

# History (cont'd)

- Marcus Fabius Quintillian (AD35-100) Once the pupil recognized the letters from tablet or blocks, Quintillian had the pupil write each letter with a pen following the grooves carves in a wax or ivory tablet
- ▶ **Johann Pestalozzi** (1746-1827) believed that one must develop the child's sense of touch, sight, and sound since <u>sense perceptions are crucial in</u> the development of the child's mind
  - Felt one should <u>teach from the concrete to the abstract and the particular to the general</u>

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# History (cont'd)

- ▶ **Marie Montessori** (1912 *The Montessori Method*) established the basis for teaching using a combination of visual, auditory, kinesthetic and tactile senses.
  - ▶ Influence mostly by Sequin (1735-1835), and Itard (1775-1838), who were influence by Pestalozzi, et al.
  - Introduced tracing sandpaper letters while saying the sounds of the letters

# History (cont'd)

- ▶ **Grace Fernald** (1943 *Remedial Techniques in Basic School Subjects*) developed a 4-stage system of tracing a word saying each word as traced until memorized writing the word from memory
  - Worked with Hellen Keller
  - ▶ The "look-say-do" method
  - Did not involve sounding out each letter and blending the sounds together

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# History (cont'd)

- **Dr. Orton, Anna Gillingham,** and **Bessie Stillman** (1965) "Before the child is asked to write, there must be whatever practice is necessary in tracing, copying, and writing from memory to dictation, the last being carried out with the child's eyes averted...' In all instances, the child says the name of the letter as he writes it."
- Orton advocated using sensory pathways to reinforce weak memory patterns
- SOS (Simultaneous Oral Spelling)
- Reading and Spelling are taught together

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# Importance of Using a Multisensory Approach

▶ How a teacher presents new instruction or reinforces prior learning is the difference
 between learning and non-learning (Sousa, 2006, Wrighton, 2010)

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# Importance of Using a Multisensory Approach

- ► Motivates students to be actively involved and engaged (Vosniadou, 2001)
  - ► "Novelty and fun gets the child's attention and keeps it during the learning process" (Wrighton, 2010)
  - "The motivational value of associating letters with interesting characters or hand motions and incorporating this into activities and games that are fun is important for promoting young children's

learning" (Summary National Reading Panel, 2000)

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# Importance of Using a Multisensory Approach

### Presents abstract information in a concrete way:

"Turning a piece of information into elaborate information, signals its importance to the brain. Adding a picture, a gesture or body movement, or connecting it to another sense, such as smell, establishes memory. 'Material that is more imaginable, or concrete instead of abstract, is better remembered. Pictures and objects are remembered better than are words. This may be because of dual coding of both an image and a word' (Terry, 2006, p. 296)."

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# Importance of Using a Multisensory Approach

- Manipulating linguistic information in their thoughts is often difficult for dyslexic students
  - Especially, if the information is abstract or fleeting, like the sound of a letter or a spelling generalization
  - They need to see [V], hear [A], say the letter name/sound [K] and move the letters or forms the letters during each task [K/T]
- Some students need to feel [K] and see their mouth forming the letters [V]

Importance of Using a Multisensory Approach

- Improves short and long-term memory, as well as retrieval:
- When teaching in a **sensorial**, **novel**, **playful**, and **meaningful** way, the brain accepts the information and establishes it into **short term/working memory** and then **stores it in long term memory** for future retrieval (Rudy, 2008). (Wrighton, 2010)
- "Playfully rehearsing new or old information is essential for memory. The more elaborate the practice, the stronger the neural connections are for remembering what is taught (Sousa, 2006; Terry, 2006)." (Wrighton, 2010)

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# What's Your Goal & How Much Is Too Much?

Goal - "Go as fast as you can, but as slow as you must!"

- ▶ You must always know *why* you are doing something in a lesson
  - ▶ It is important to make a concept concrete, memorable, easy to retrieve, and usable on a daily basis using VAKT activities

### How much?

- Being diagnostic and prescriptive allows you to know how much repetition is needed and how concrete you need to make the information
- For students who are severely impaired, your activities should intensively implement as many VAKT components as possible
  - Visual and Auditory drills should involve a Kinesthetic/Tactile component
- Less impaired students, who have an easier time processing information and retrieving it quickly, may not always need to have as much VAKT (i.e., using keywords, less TCCC, less repetitions)

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4

15

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(Slides 2-13)

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(Slides 9-13)

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# Realia\*

### (not a comprehensive list)

- **Counters** (for segmenting sentences, words, onset and rime, phonemes; blending, manipulating, and substituting sounds)
- Unifix cubes, bingo chips with wand, colored glass or stones, coins, tiles
   (wood, ceramic, cardboard), blocks (wood, plastic, paper, foam)
- **Mirrors**: for auditory discrimination (watching how ones mouth forms various speech sounds)
- **Writing materials**: pencil, pens, markers, crayons, gel boards, color chalk on black paper
- **Writing surfaces**: popsicle sticks, paper (colored & plain), shaving cream, salt, rice, sand, sandpaper, screens, bumpy cardboard, dry-erase boards, index cards, scratch boards, paper on plastic needlepoint mesh

# Realia\*

(not a comprehensive list)

- ▶ **Magnets**: letters, kinds of syllables, spelling generalizations & rules (use magnetic tape)
- Posters and signs especially those with pictures or mnemonics
- ▶ **Virtual realia**: iPads/tablets, computer, smart-boards
- ▶ Game boards and materials: dice, spinners, index cards, moving pieces, game boards: purchased, homemade, computer made

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# Auditory Discrimination Activity

- Teacher says word
- Student repeatsword
- Student puts a chip in the cup above the correct vowel sound



*NOTE:* Some students may need to finger spell or use counters to isolate the vowel sound.

# Finger Writing

When using a finger for either skywriting or tracing/writing, the student should use 2 fingers, which will create more Kinesthetic/Tactile feedback to the brain than using just 1 finger (it involves more motor movement)



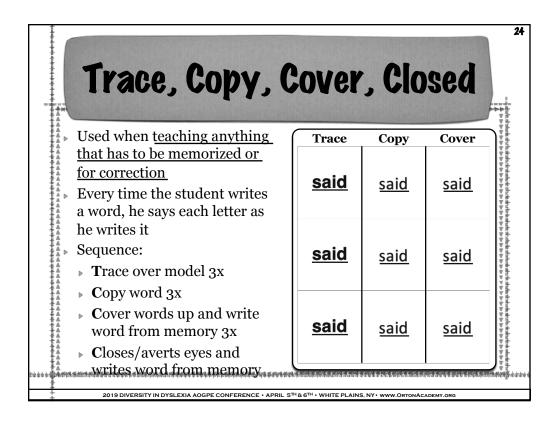
Remember that the student must always say each letter as he writes it; thus providing Auditory feedback.

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# Finger Writing

- Skywriting or writing on a surface that leaves no visual impression will provide only kinesthetic feedback; there is no visual feedback because there is no image to see after writing.
- Writing on a surface like sand, rice, shaving cream, carpet, an iPad, crayon on paper over a screen, etc., will leave an impression and provide Visual feedback to the student.





25

### Trace, Copy, Cover, Closed Trace Copy Cover Phonics/Spelling Generalizations au <u>au</u> <u>au</u> As the student writes each letters, he says the letter's name followed au au au by a keyword or rule

the beginning or the middle"

Ex: "au says /au/ in

au au au

# "Touch and Say"

- When the student makes an error reading either a word in isolation or in connected text.
- The teacher says, "Touch and Say" [A]
- The student then touches the first letter [V/K/T] and says its sound [V/K]; he does the same for each subsequent letter. Finally, the student blends all the sounds together [V/A/K], while moving his finger under the word [K/T] to decode the word correctly.
- Usually, as the student focuses his attention on each letter and sound, he can self-correct his error.
  - ▶ If he cannot self-correct, then other correction procedures should be used as needed.

# Finger Decoding & Spelling

**Decoding** - student puts up a finger, on his non-writing hand, for each letter seen. Starting with the thumb each phoneme is said as a finger is extended and then blended together to say the word -  $|\check{a}|/t = \underline{at}$ 

For the left-handed student, the right hand is turned palm down and the thumb is extended first so blending proceeds left to right.

**Spelling** - word is echoed as the student catches the word in his

non-writing hand, and puts up one finger at a time, saying the phoneme for each letter

- Word is then written using S.O.S.
- When writing, some student can use the hand they are stabilizing their paper with to finger spell.
   Right-handed students will then count from pinky to thumb, palm down, L-R. Left-handed students

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# Arm Tapping for Blending

If the student cannot blend the letter sounds together to read a CVC word, this technique is helpful

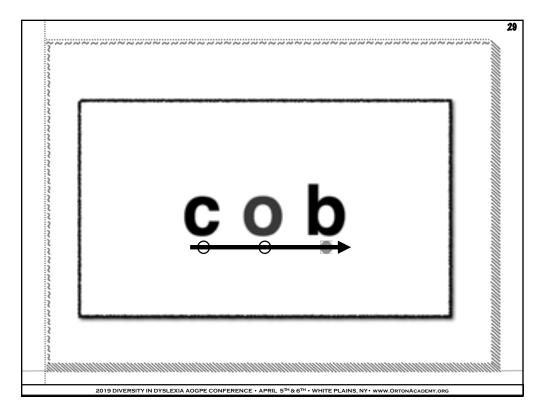
The student sees the word printed/typed on a drill card; you can write the vowel in a different color from the consonants if needed

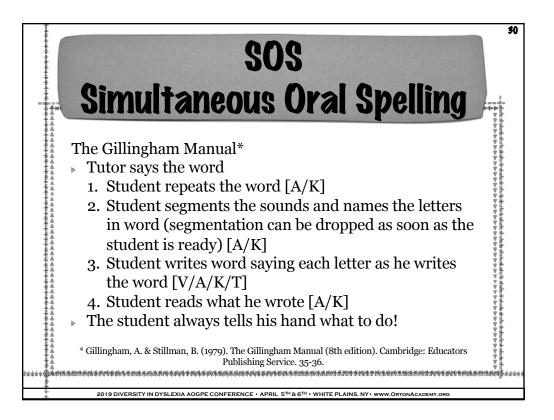
### Technique:

- The student extends his non-writing arm and says the first consonant's sound while tapping his shoulder.
- The vowel's sound is said aloud while tapping the elbow joint.
- The last consonant's sound is said aloud while tapping above the wrist.
- ▶ Finally, the student puts his hand on his shoulder and while sliding down his arm, he blends each sound as he touches each area on his arm. If he cannot blend the word together, then he returns to his shoulder and slides down his arm, blending the sounds faster and faster.

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28





Hand Motions

Short Vowel Hand Cues

a - apple - /ă/
Hold invisible apple in hand to bite

i - itchy - /ĭ/
Scratch back of hand with 1 finger

o - olive - /ŏ/

Make an olive shaped o with thumb & rest of fingers to pop into mouth
u - upper - /ŭ/
Shape hand's web space in shape of a u\_& push up
e - eddy - /ĕ/

With index finger write an e\_& circle around like an eddy in the water

# Hand Motions (cont'd)

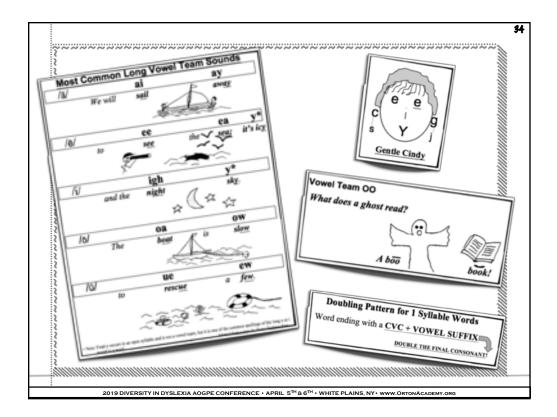
- Finger Decoding and Spelling
- Different types of syllables or syllable divisions
- Remembering definitions: digraph, blend, baseword, compound word, syllable, etc.
- Many students who need this kinesthetic/tactile feedback will develop their own hand motions for specific concepts

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# Mnemonic Devices

- Help student remember and retrieve information, especially if the information is abstract
- Words for decoding/spelling generalizations should be in the order of frequency of occurrence, or location in a word/syllable
- Keywords should be concrete, familiar, and transparent so the student can easily recognize the connection
- Spelling rule mnemonics should be short and concise

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Visual Drill, Sorting, Card & Board Games





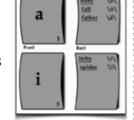
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# Visual Drill

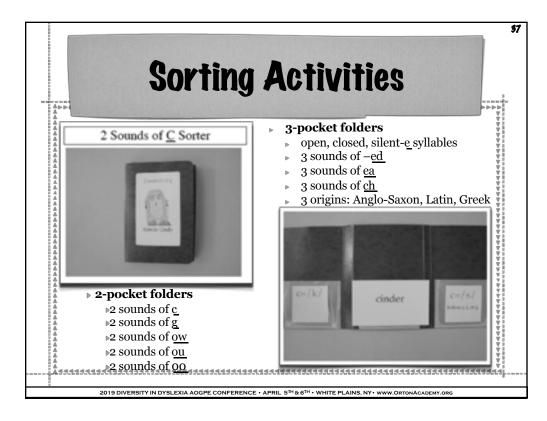
Association 1

Visual: The student sees the drill card

- 1. Teacher holds up drill card with grapheme [V]
- 2. Student says letter(s) name [A]
- 3. Student says keyword [A]
- 4. a. Student writes letter(s) [V/K/T] as
- 4. b. Student says sound [A]



Eventually, the student can just reply with the sound



# Card Games - Grab It -

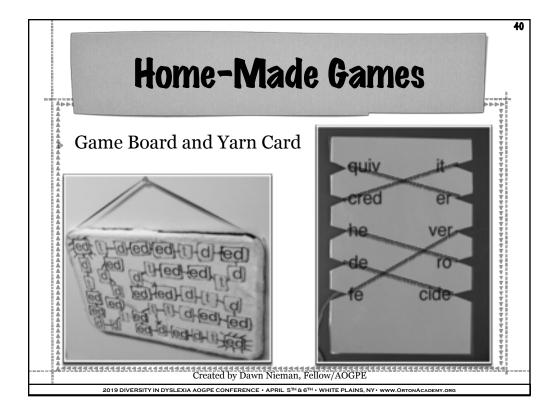


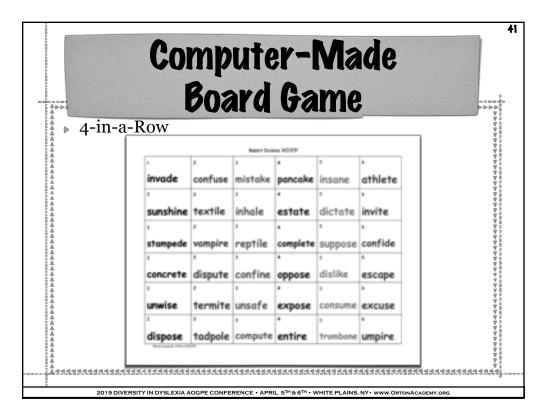
- Use any phonetic single word drill cards with words that have been taught for decoding (50-75 cards)
- When 2 people play, each person reads only half of the words
- Write "Grab It" on 7 or more drill cards (always an odd number)
- One person puts the "Grab It" cards in various places in the card deck; another person

- cuts the deck
- Players alternate taking a card from the top and reading their card; they keep the card
- When a player draws a "Grab It" card, the player takes all the other person's cards
- have been read, or when the time expires if a time limit was set

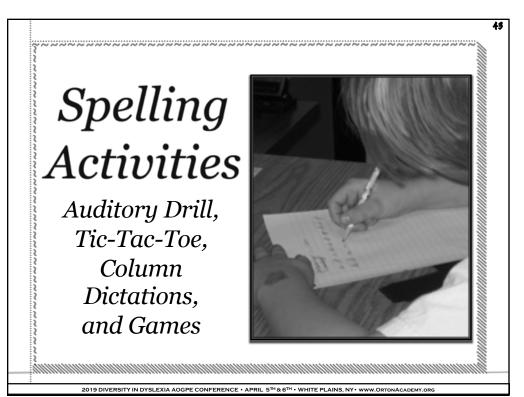
# Card Games - Go Fish -

- Players match words "Do you have table?"
- Players can match words and picture card (picture exemplifies the word) - helps improves vocabulary
- Silent-e Go Fish
  - Players match a CVC with its corresponding VCe word "I have pin. Do you have pine?" or "I have mate. Do you have mat?"









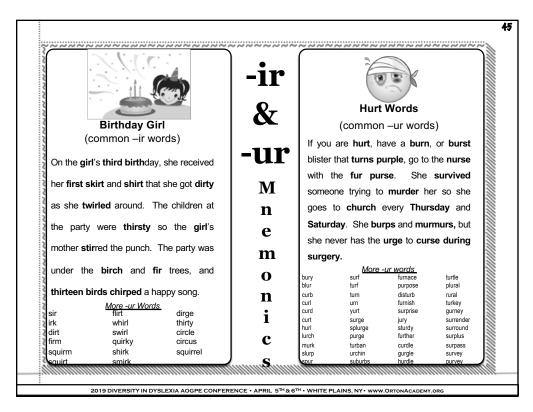
# **Auditory Drill**

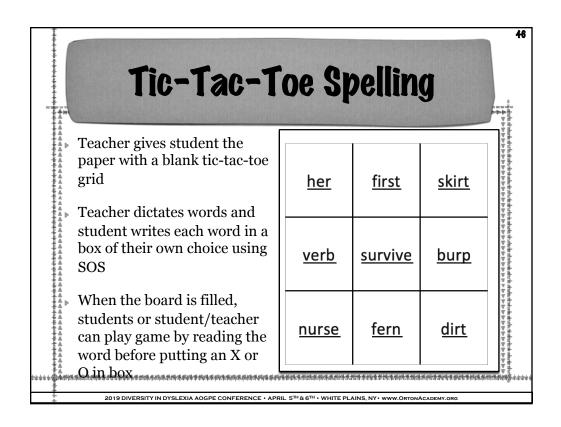
Associations 2 & 3
(Phoneme Pictation - yellow card deck)

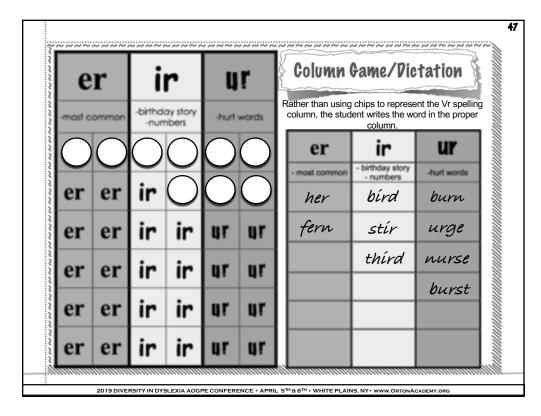
**Auditory**: The student <u>hears</u> the sound (phoneme) and does not see the drill card

- 1. Teacher dictates phoneme  $[A_2]$
- 2. Student echoes phoneme [A2]
- $\textbf{3.} Student \ says \ the \ letter(s) \ name \ [A_2], \ keyword, \ and \ sound$
- **4.** Student writes the letter(s) while saying its name  $[V/K/T_3]$

Eventually, the student just echoes, and writes the letter (s) while saying the letter name







**Materials:** 

Game board, bingo chips/markers, game/drill cards with er, ir, ur words (words you have introduced & practiced previously), shuffled & put in a stack.

\_\_\_\_\_

see mnemonic sheets for i<u>r</u> & <u>ur</u> words; <u>er</u> words: <u>her</u>, <u>fern</u>, <u>germ</u>, <u>herd</u>, <u>nerd</u>, <u>jerk</u>, <u>perk</u>, <u>term</u>, <u>verb</u>, <u>clerk</u>, <u>perch</u>, <u>Bert</u>, <u>serve</u>, <u>nerve</u>, over, never, after, faster, enter, fever, banker, washer

### 3 Column Game Rules:

- First person draws a card off the top of the stack & reads the word.
- The next person has to spell the word aloud &/or writes the word on paper, & puts a chip/marker on the appropriate box (ex: nurse = ur).
- ▶ Each person takes turns, one reading the word, & the other spelling the word.
- ▶ You can decide when the game will end
  - When have a chip in each box in the first row: er, er, ir, ir, ur, ur
  - ▶ When have a chip in each box in the first 2 rows, etc.
  - Or set a time limit

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Karen K. Leopold, Fellow/AOGPE

### Other Concepts for 3-Column Game Board

- Once student(s) have memorized rules for making choices, cover up or remove second row with rules from game board
- You can make the same type of game for:
  - 3 way to spell /ā/: a, ai, ay
  - 3 way to spell /ō/: o, oa, ow
  - ▶ 3 ways to spell /ī/: i, igh, y
  - ▶ 3 ways to spell /k/: c, k, ck (after teaching hard/soft g)
  - 3 ways to spell /j/: j, ge, dge (after teaching hard/soft g)
  - 3 ways to spell /shən/: tion, sion, cian

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# Syllable Column Dictation

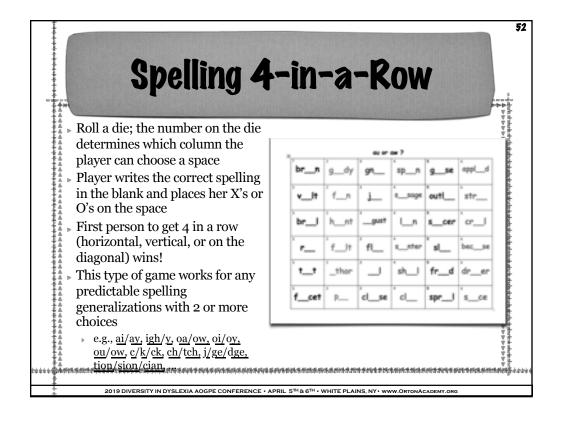
### **Materials:**

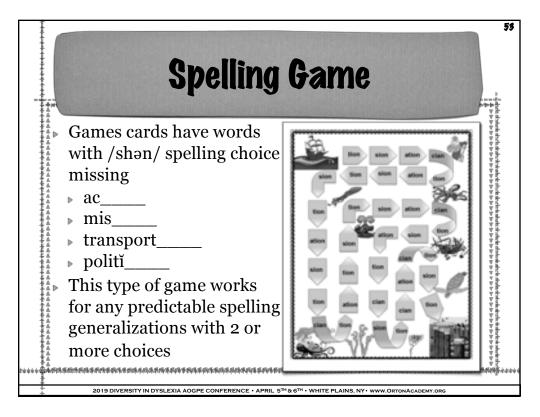
- Start with a list of 2-syllable words with various kinds of syllables, put each syllable on a separate card
- ▶ On paper with columns, label each column with each kind of syllable you've taught (<u>O, C, VCe, VV</u>, etc.)
- Teacher dictates each syllable in random order
  Student writes each syllable using SOS and placing it in the proper column
- After dictations are completed, try to form as many words as you can from the syllables

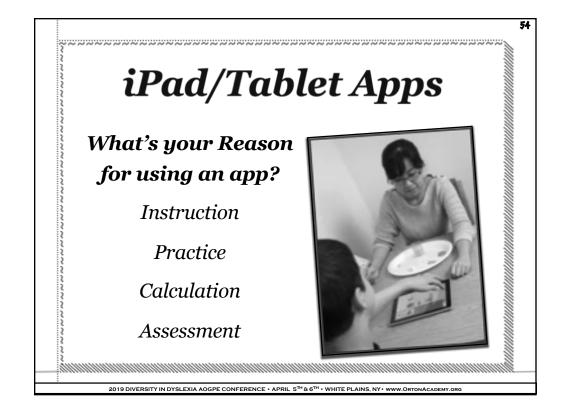
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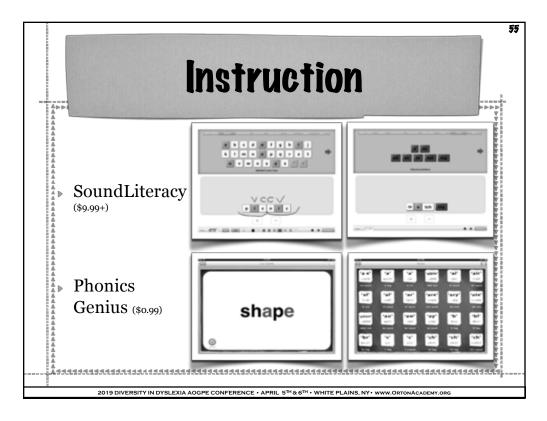
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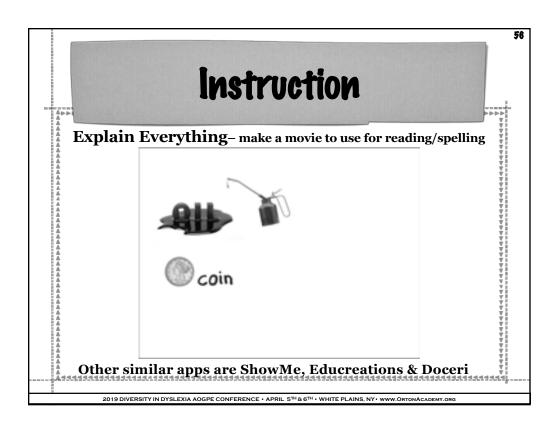
Open	Closed	Silent-e	How many word can you make?
<u>re</u>	com	<u>vite</u>	1. relax
			2. unite
<u>u</u>	<u>lax</u>	<u>plete</u>	3. polite
<u>po</u>	<u>pen</u>	<u>lite</u>	4. open
			5. complete
<u>o</u>	<u>in</u>	<u>nite</u>	6. invite

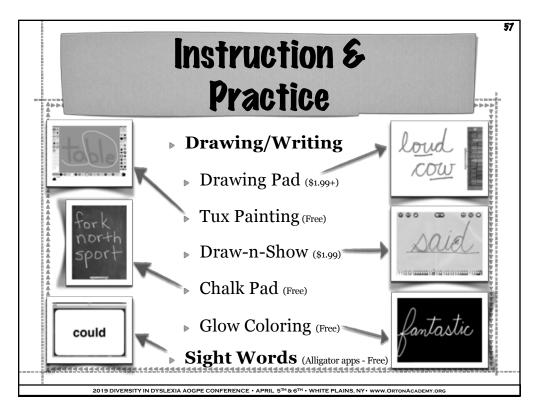


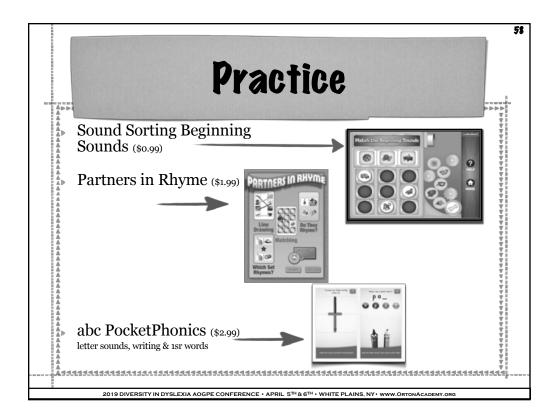


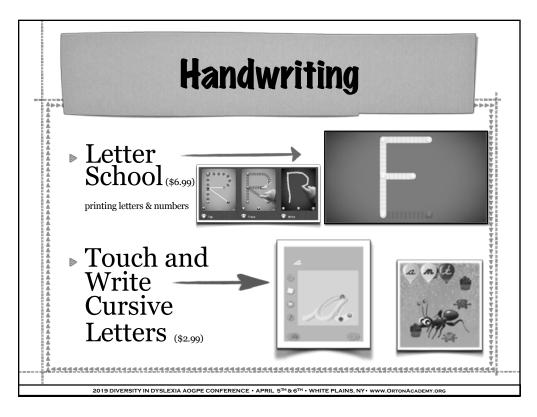


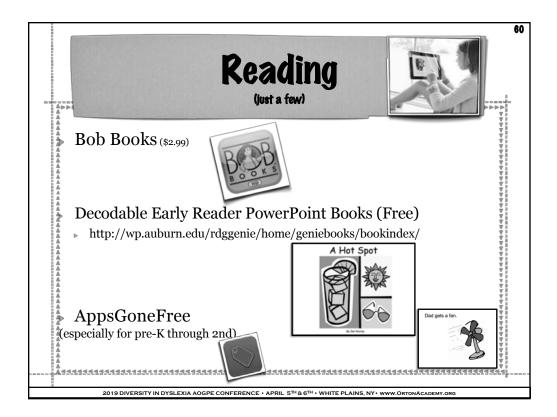


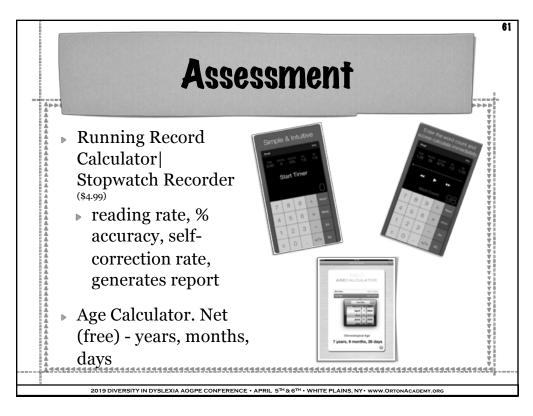


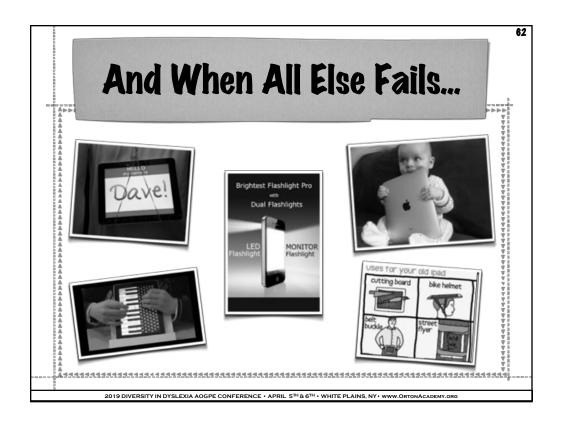












# Other Resources

- https://dyslexiaida.org/dr-cheesmans-app-chat-findthe-best-literacy-apps-for-preschool-and-kindergartenchildren
- https://www.atdyslexia.com/ios-apps/
- http://www.readingrockets.org/literacyapps
- Pinterest & Searches

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# An old Chinese proverb states, "Tell me and I'll forget; show me and I may remember; involve me and I'll understand." Thank you! Karen K. Leopold, MS Ed, Fellow/AOGPE Email: kleopold.ogstars@gmail.com