



- eneren Introduction •
- Speech Sound Production and Disorders Language Fluency/Stuttering Voice •

- Social Language Questions

### Introduction

- Mom of three, ages 21, 14, and 12
- Bachelor degree Early Childhood Education from Illinois State University in 1996
- Experiences in Illinois, Colorado, and Wisconsin
- Master degree in Communicative Disorders from
- UW-Whitewater in 2008
- Experiences in Birth-three and skilled nursing facilities in the role of SLP for 5 years
  - School-based speech therapist in Jefferson for 10 years serving PK-21, currently at Delavan-Darien

So many aspects that complement each other!

Smaller group, individualized attention

What grades are the students you are working with?

Quality of communication decides how clear the connection of a thought or idea in my brain matches the thought or idea we create for our listeners and readers: Make that bridge the best it can be!



# Speech Sound Production and Disorders

#### Prevalence

Overall, 2.3% to 24.6% of school-aged children were estimated to have speech delay or speech sound disorders (Black, Vahratian, & Hoffman, 2015; Law, Boyle, Harris, Harkness, & Nye, 2000; Shriberg, Tomblin, & McSweeny, 1999; Wren, Miller, Peters, Emond, & Roulstone, 2016).

Taken from ASHA website

## Articulation vs Phonology

Speech errors might sound the same, but the reason why they are taking place can be different.

#### Articulation

- Errors take place in the articulators, the sound is processed correctly
- Issue takes place in the motor commands
  - Say "wike" but write "like"
  - Can follow cues to move articulators and process accuracy (hide tongue behind teeth and smile! /l/)

Chart of Expected Mastery-Articulation
Age of Expected Mastery is an important concept to consider:
Expected Mastery of Speech Sounds
<ul> <li>(Referral criteria for eligibility for speech services on second page)</li> </ul>

•	On it's own planet
•	A word about /r/
• • • • • • •	There are 32 variations of /r/ depending on position in word, blend consonants, vocalics (ar, er, ire, air, ear, or), and stress
• • • •	Vocalic /r/ is not on the chart, expected mastery can be closer to 7 or 8 years old

## Articulation vs Phonology

### Phonology

- Phonology errors are patterned and rule-based, issues are in the processing of the sound (equated to replacing all /k/ and /g/ "velars" for /t/ and /d/
  - "stops" in conversational speech and writing
  - Student will write "wike" for the word "like"
    - Deletion of consonants in blends (*nake* for snake), final consonant deletion (*hi* for hike), and syllable deletion (*bassball* for basketball)

Chart of Phonological Processes and
Expected Age of Elimination
Phonological Processes

## WI Criteria for Eligibility

- Significant discrepancy from typical on a norms based assessment
- Intelligibility below expectations across
  - environments
- Less than 30% stimulable for sounds in error
- Cannot be due to dialect, age, culture
  - Adversely impacts educational, social,

emotional, vocational development

### Factors to consider: speech sound errors

- ASHA (American Speech-Language-Hearing Association)
- <u>ASHA website</u>
- Hearing/history of tubes/congestion
- Oral structures including palate height,
- frenulum
- Family history
  - Gender
  - Pre and peri-natal complications
  - Presence/history of disorders

#### **Disorders related to Accuracy**

#### Dysarthria

Weakness in the muscles used to make speech sounds (lips, jaw, tongue)

#### - Apraxia

Groping behaviors when the student is "getting their mouth ready" to produce a sound, accuracy may be inconsistent even within the session, vowel distortion, difficulty in sequencing motor commands from brain, watching model's mouth important for accuracy <u>Apraxia kids</u> <u>Kaufman Approach</u> (vowel tactile cues)

### Strategies for Accuracy

### Repetitions-retrain the brain

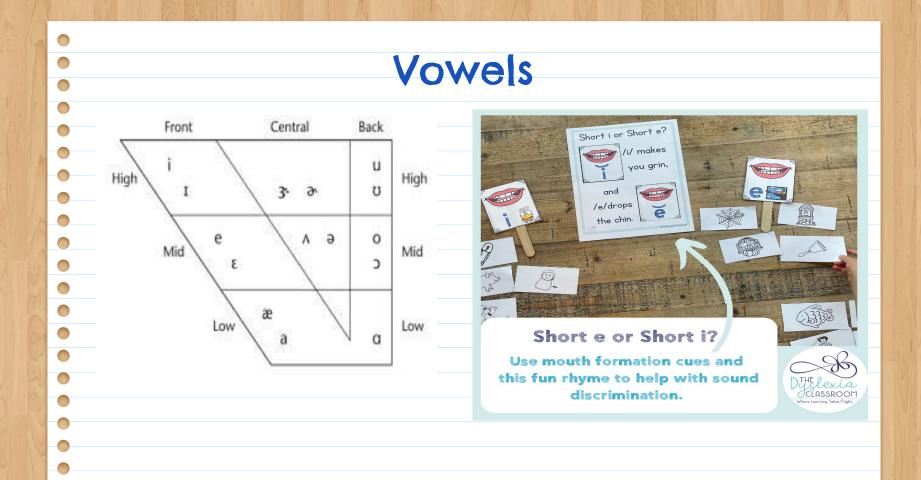
- Model with emphasis on accuracy.of
- error
- "Singsong" intonation
- Specific description of articulator
  - placement (your tongue peeks out
  - between your teeth)
  - Mirror (caution)



### **Tactile Cues**

- /t/ and /d/ flick fingers next to mouth (tongue needs to go all the way up)
- /h/ "huff" on open hand

- /I/ smile, cue tongue behind top teeth, and finger in L shape by mouth
- /p/ and /b/ bounce finger off closed lips
- /m/ slide finger across closed lips
  - /w/ circle finger around circle lips
  - /k/ and /g/ finger across neck (open mouth and tongue stays on the floor, "cough up a hairball")
  - /r/ smile (bunches up and elevates the back of the tongue)





#### Possible Indicators of Language Disorder-early grades

Some children have problems with receptive language, or understanding. They may have trouble:

- understanding what people mean when they use gestures, like shrugging or nodding
- following directions

- answering questions
- pointing to objects and pictures
- -• knowing how to take turns when talking with others.

Some children have problems with expressive language, or talking. They may have trouble:

- asking questions
- naming objects
- using gestures
- putting words together into sentences
- learning songs and rhymes
- using correct pronouns, like "he" or "they"

### Possible Indicators of Language Disorder-older grades

- difficulty following directions in the classroom
- poor grades

- difficulty reading
- poor spelling
- limited vocabulary
- difficulty telling stories or expressing ideas.
  - difficulty thinking of words
  - using simple sentence structure compared with peers
- difficulty using correct word endings
- difficulty making inferences or understanding figurative language
- difficulty participating in conversations with peers or adults

## Possible Causes for Language Disorder

• autism

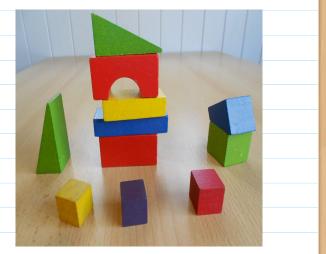
- being born early
- brain injury
- cerebral palsy
- Down syndrome or Fragile X syndrome
- family history of language problems
  - fetal alcohol spectrum disorder-
  - hearing loss
- learning disabilities
  - low birth weight
  - problems with feeding and nutrition
  - stroke

Language Disorder Resource
All information from language slides taken from
<b>ASHA website</b>
ASHA Language Disorders
Valuable resource for teachers and parents with
links for activities and other resources

### Knowledge of Basic Concepts

- Position, time, quantity, quality
  - same/different, above/below, behind/ in front, front/back,
    - top/bottom/center
- unless, either/or, neither/nor, if/then
  - more/less, few/many/some/all
- Sequencing

- before/after
- first, next, last
- beginning, between, middle
- ordinal numbers



### Ability to respond to WH questions accurately

- Respond to the question with the specific information
- being asked

- Who: a person
- Where: a place
- Why: a reason, the answer starts with "because"
- When: a time, on the clock, season, morning/night
- What: an idea, object, action

Asking questions: cue with "start with..."

WH question visual



WH-QUESTIONS

CUES & VISUALS

#### Sentence Comprehension

- negation, passive voice, conjunctions, clauses, complexity level
- of sentence

#### Grammar

- irregular verbs and plurals, noun and verb agreement, verb
- tense, marking plurals and possessives (/s/), pronouns
- (reflexive, possessive, subjective, and objective) correct use
  - and gender
  - "Thems has he toy"

### -Following Directions

- knowledge of basic concepts, executive functioning: initiation
- and sustained attention to task, ability to recall, vocabulary
  - knowledge, varying degrees of attributes and steps for success

### Vocabulary Acquisition and Use

- life experiences, background knowledge, synonyms/antonyms
- EET systematic program for vocabulary, word finding, and
- expressive language

#### Expanding Expression Tool

#### Sara Smith

- Group: categories/like attributes (function, use, description)
- Do: verbs
- Look like: (size, shape, and color) adjectives
- Made of/Come from: materials, origin
- Parts: parts of the whole
- Where: location/place
- What else do I know?: knowledge and opinions
- If working with older kids: can use for book summaries
- Expanding Expression Tool

Free EET Visual

### Strategies for Language Learning

- Visuals for directions or routines in reading room, take
- pictures of individual student demonstrating desired
- behavior Visual for Following Directions
  - Boom Cards

- Flannel board stories
- 1- to 2 step directions with or without modifiers.
- Repetition out loud, visualization, association for recall
- Sequencing visuals for first, next, last
- Copy stories, sequence stories correct or incorrect, fill in missing events
  - Field of two, which one sounds right?
  - Attach language to experience whenever possible-present lack

M/L Critoria Eligibility for Somucos	
WI Criteria Eligibility for Services	
<ul> <li>Significant discrepancy from typical on a</li> </ul>	
<ul> <li>norms based assessment</li> <li>Observed in natural environment</li> </ul>	
<ul> <li>Adversely impacts educational, social,</li> </ul>	
emotional, vocational development	



•	Fluency: Stuttering and Cluttering
•	
	Genetics-family history/genes
	Neurophysical-brain structures
•	and functions
•	Environmental-lifestyle,
•	anxiety/sensitivity
•	
•	

### Fluency: Stuttering and Cluttering

#### **Risk Factors for Stuttering**

- sex of child—boys are at higher risk for persistence of stuttering than girls (Craig et al., 2002; Yairi & Ambrose, 2013);
- family history of persistent stuttering (Kraft & Yairi, 2011);
- time duration of greater than 6–12 months since onset or noimprovement over several months (Yairi & Ambrose, 2005);
- age of onset—children who start stuttering at age 3½ years or later (Yairi & Ambrose, 2005);
  - slower rates of language development (Leech et al., 2017,-
    - 2019) or co-occurring speech and language impairment (Ntourou et al., 2011; Yaruss et al., 1998) **speech and language** 
      - development mismatch with complexity of ideas to express

### Fluency Disorder Indicators

#### Stuttering

- repetitions of sounds, syllables, and monosyllabic words (e.g., "Look at the
- *b-b*-baby," "Let's go out-out-out");
- prolongations of consonants when it isn't for emphasis (e.g., "Sssssssometimes we stay home"); and
- blocks (i.e., inaudible or silent fixation or inability to initiate sounds).

These disfluencies can affect the rate and rhythm of speech and may be accompanied by

- negative reactions to speaking;
- avoidance behaviors (i.e., avoidance of sounds, words, people, or situations that involve speaking);
- escape behaviors, such as secondary mannerisms (e.g., eye blinking and head nodding or other movements of the extremities, body, or face); and
- physical tension.

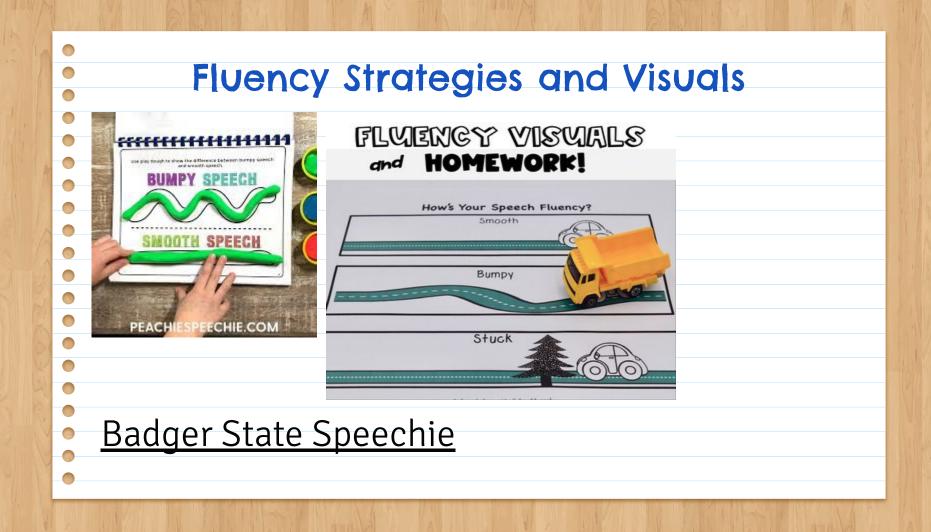
### Fluency Disorder Indicators

Cluttering- One third of people who stutter also clutter in some form

- atypical pauses within sentences that are not expected syntactically (e.g., "I will go to the / store and buy apples"; St. Louis & Schulte, 2011),
  - deletion and/or collapsing of syllables (e.g., "I wanwatevision"),

- excessive levels of typical disfluencies (e.g., revisions, interjections),
- maze behaviors or frequent topic shifting (e.g., "I need to go to...I mean I'm out of cheese. I ran out of cheese and bread the other day while making sandwiches and now I'm out so I need to go to the store"), and/or
  - omission of word endings (e.g., "Turn the televisoff").

Fluency Resources	
<ul> <li>Fluency slide information taken from</li> </ul>	
ASHA Fluency Disorders	
<ul> <li>Pamphlets, information for parents and</li> </ul>	
<ul> <li>teachers, FAQ, famous people who</li> <li>stutter(-ed)</li> </ul>	
The Stuttering Foundation  Stuttering The Stutter Foundation  Since 1947-Helping Those Who Stutter  Stutter St	
www.StutteringHelp.org www.tartamudez.org 800-992-9392	



Fluency Strategies and Visuals	
Stuttering Visual	Rate of Speech * Turtle Talk
<ul> <li>"Articulation helpers"</li> <li>Parts of body</li> <li>Create relaxed environment</li> </ul>	Diaphragmatic () "Belly Breathing"
	Easy Onsets "Easy Relaxed Start"
	Light Contact "Soft Touch"
	Stretchy Speech C
	Pausing "Take a Breath"

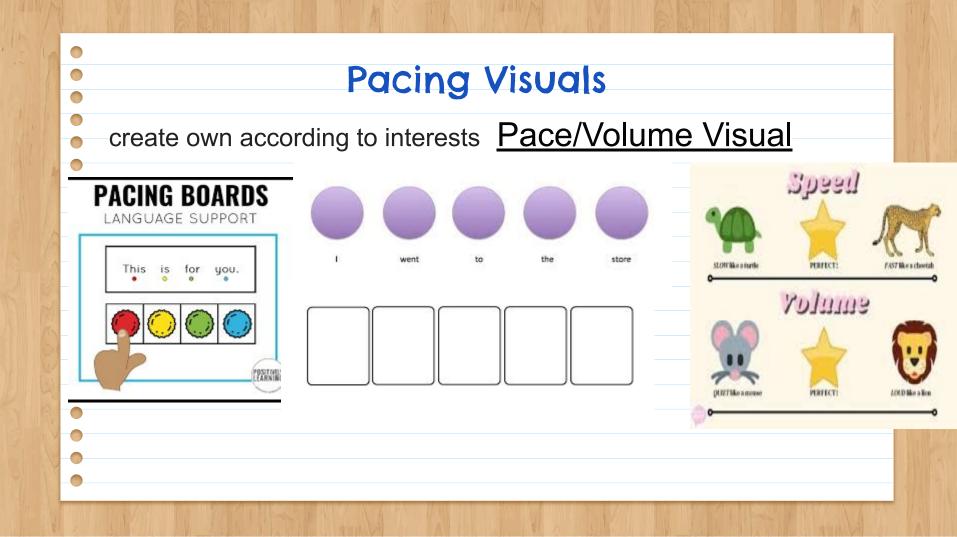


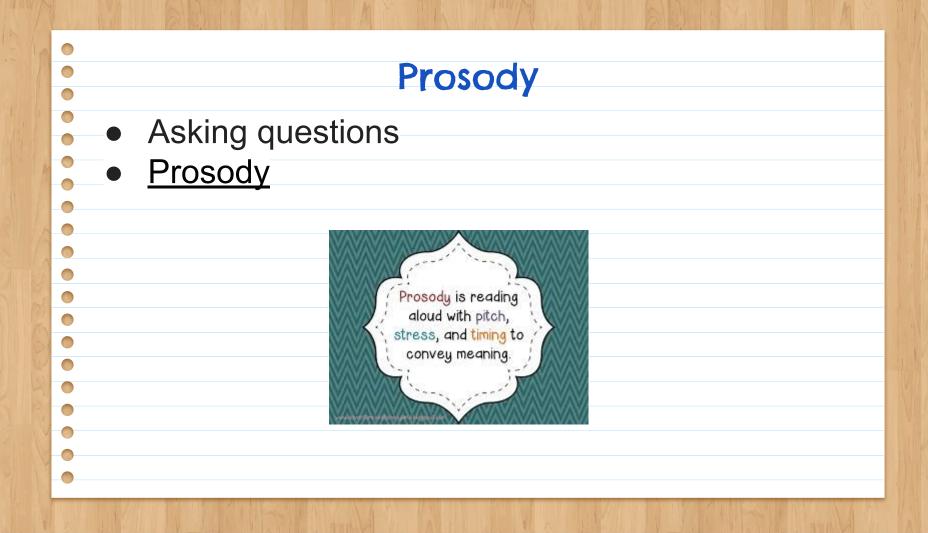
## Clarity

## MVP

Students are the Most Valuable Players in their own speech Your message is important! Say it clearly so people can understand your message

- **Move your mouth- get those articulators going**
- Volume- use breath to power words, aim at a
- distant point, posture
- Pace- not too fast, not too slow, just right
- Visuals like turtle/cheetah speech vs smiley and
- pacing board helpful







## Michelle Garcia Winner

- Smart guess for prediction
- Smart guess vs silly guess
- Reading body language/expression and
- Explicit teaching of awareness of others/different perspective/feelings/emotions for inferencing
  - ID problem and solutions involve flexible thinking
  - Expected vs Unexpected behavior: comfortable or uncomfortable (thumbs-up or thumbs down choice)
  - Thoughts and bodies part of the group-how do we communicate that?

## Michelle Garcia Winner Social Thinking





