

The Role of a Speech-Language Pathologist (SLP) in the Schools & Additional Information to Support Your Child

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THE PRACTICE

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Credentials/Training

- Master's/Doctoral degree
- Certificate of Clinical Competence (CCC)
 - From the American Speech-Language Hearing Association (ASHA)
 - Obtained after supervised post-graduate school training
- State SLP Licensure
- State Educator Licensure



What does an SLP do?

- Treats, develops & implements IEPs, documents progress
- Assesses & evaluates
- Screens to identify those at risk & prevent challenges
- Collaborates/consults with others
 - Classroom Staff
 - Other Service Providers (e.g., OT, PT, school psychologist)
 - Outside Service Providers
- Advocates/supports student/family, teacher, school, district, and state outcomes (e.g., testing)

- Works across all grade levels in a school district to provide appropriate speech-language services
- Addresses personal, social, academic, and vocational needs that have an impact on the attainment of educational goals
- Adheres to federal and state mandates, as well as local policies
 - This is in accordance with IDEA (Individuals with Disabilities Education Act) /FAPE (Free and Appropriate Education) that ensures that children ages 3-21 with disabilities receive the support that they need in a public school setting.
- Serves students across a range of disorders
- Provides assistance with foundational skills required for curriculum learning
- Supports literacy achievement
- Provides culturally competent services (i.e., a language difference versus a language disorder)
- Offers service delivery models in the least restrictive environment for students with disabilities and integrates services with other students as appropriate.
- Collaborates with universities to mentor graduate students
- Maintains and furthers knowledge/skills via professional development



Across what domains?

- Receptive Language = Comprehension of Language
- Expressive Language = Verbal Output


- Syntax = the system governing the order of words to form sentences
- Morphology = the system that governs word structure/
construction of word forms
- Semantics = the system that governs the meaning of words/
sentences

Morphology

Morphology is the study of how morphemes are put together. A morpheme is the smallest meaningful unit of language. Grammatical morphemes apply inflection that signals meaning to nouns, verbs, and adjectives.

Age	Grammatical Morphemes	Example
19 – 28 months	<ul style="list-style-type: none"> Present progressive -ing 	crying
29 – 38 months	<ul style="list-style-type: none"> Regular plural -s Present progressive -ing without auxiliary Semiauxiliaries Overgeneralization of past tense -ed Possessive -s Present tense auxiliary 	socks baby crying gonna, gotta, wanna I run ned . girl' s hat can, will, be, do
39 – 42 months	<ul style="list-style-type: none"> Past tense modals "Be" verb + present progressive -ing 	could, would, should, must, might The baby is crying.
43 – 46 months	<ul style="list-style-type: none"> Regular past tense -ed Irregular past tense Regular third-person-singular, present tense Articles 	He kicked ed . She ate . He drinks. a boy, the tree
47 – 50 months	<ul style="list-style-type: none"> Contractible auxiliary Uncontractible copula Uncontractible auxiliary Irregular third person singular Past tense "be" verb 	The boy' s talking. It is big. He is swimming. She has it. She was dancing.

We'd like to thank the following sources from which we obtained information for this section: Bowen (http://members.tripod.com/Caroline_Bowen/?BrownsStages.htm); Brown (1973); Haskill, Tyler, & Tolbert (2001); and Retherford (2000). For more information, please see the full References, Websites, & Resources list on pages 22-24.

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- Pragmatics = Social skills/use of language
 - Articulation/Phonology = speech sounds
 - Dysphagia = difficulties with swallowing
 - Voice Disorders = vocal quality (e.g., hoarseness, loss of voice)
 - Fluency/Stuttering = Interrupted speech

Receptive vs. Expressive Language

Source:

<http://pediaa.com/difference-between-receptive-and-expressive-language/>



Receptive language is the ability to understand.

Listening and reading skills fall into this category.

First language skills to be developed.

It is relatively easier to develop.



Expressive language is the ability to communicate.

Speaking and writing skills fall into this category.

Developed after the receptive language skills.

It is more difficult to develop than receptive skills.



Pragmatics

- ◊ Nonverbal communication
- ◊ Following social cues
 - ◊ What is expected/unexpected in a given social situation?
- ◊ Following conversational norms, which may differ across cultures.
 - ◊ Topic maintenance/initiation
 - ◊ The ability to use language across different communication functions (e.g., to greet, to request, to inform)
 - ◊ Changing language according to the needs of the listener/situation

Nonverbal communication includes:

Whole Body Listening

1. Draw a line from the body part to how you listen with that body part.
2. Color the picture

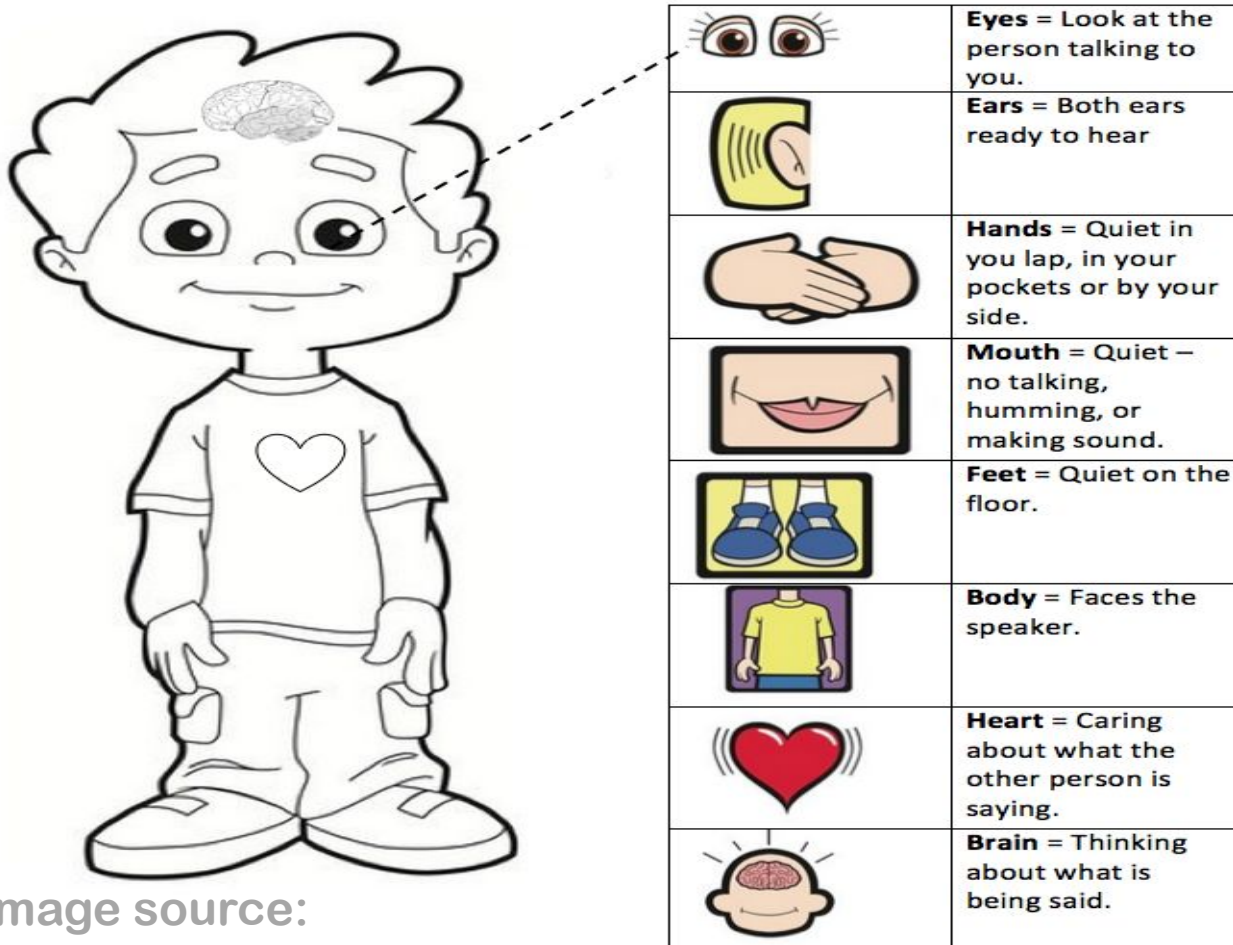


Image source:

<https://www.pinterest.com/explore/whole-body-listening/>

- Proximity
- Body orientation
- Body movements (e.g., gestures, nodding)
- Posture
- Eye-contact
- Facial expressions

Example (Pragmatic Skills, Ages 3-5):

36 to 48 months:

Pragmatics

- New intents include reporting on past events, reasoning, predicting, expressing empathy, creating imaginary roles and props, and maintaining interactions
- Direct requests (e.g. "I want a cookie") decrease in frequency as indirect requests (e.g. "I am hungry") increase
- Makes conversational repairs and corrects others
- Adds more fillers to acknowledge a partner's message (e.g. "uh-huh" and "okay")
- Uses language for fantasies, jokes, and teasing
- Begins code-switching when talking with very young children (i.e. adjusting language to a simpler level using "baby talk")
- Participates in longer dialogues
- Narratives are "primitive" with a major theme and some organization of events in time

48 to 60 months:

Pragmatics

- Uses indirect requests
- More elaborate discussions of emotions and feelings
- Correctly uses deictic terms (those that specify time or place from the perspective of the speaker) including "this", "that", "here", and "there"
- Ability to address specific requests for clarification increases
- Narratives are "chains" of unfocused sequences of events
 - Have some plot
 - No central character
 - No high point or resolution

Source:

<http://www.rehabmed.ualberta.ca/spa/phonology/milestones.pdf>



Articulation/Phonology

- Phonology: the study of speech sounds
- Sounds are typically acquired in a developmental progression.
- Phonological processes: patterns of sound errors that young children use to simplify speech as they are learning to talk; they are classified by sound substitutions or sound omissions, and typically disappear at a given age; when they persist past this age, it is problematic.

Sounds Acquired by Age:

YEARS OF AGE									
1	2	3	4	5	6	7	8		
vowels									
p									
m									
h									
n									
w									
b									
k									
g									
d									
t									
ng									
f									
y									
r									
l									
s									
ch									
sh									
z									
j									
v									
(the <i>th</i> in thumb)			th						
(the <i>th</i> in this)			th						
(the sound heard in measure)			zh						

Source:

Phonological Processes:

SUBSTITUTION	Definition	Example	Approx. age of elimination
Backing	When alveolar sounds, like /t/ and /d/, are substituted with velar sounds like /k/ and /g/	<i>"gog" for "dog"</i>	Usually seen in more severe phonological delays.
Fronting	When velar or palatal sounds, like /k/, /g/, and sh, are substituted with alveolar sounds like /t/, /d/, and /s/	<i>"tootie" for "cookie"</i>	3.5 yrs.
Gliding	When /r/ becomes a /w/, and /l/ becomes a /w/ or y sound	<i>"wabbit" for "rabbit" or "yeyo" for "yello"</i>	6 yrs.
Stopping	When a fricative (like /f/ or /s/) or affricate (ch, j) is substituted with a stop consonant like /p/ or /d/	<i>"pan" for "fan" or "dump" for "jump"</i>	/f/, /s/ by 3; /v/, /z/ by 3 1/2; sh, ch, j by 4 1/2; th gone by 5
Vowelization	When the /l/ or er sounds are replaced with a vowel	<i>"appo" for "apple" or "papuh" for "paper"</i>	—
Affrication	When a nonaffricate is replaced with an affricate (ch or j)	<i>"joor" for "door"</i>	3 yrs.
Deaffrication	When an affricate, like ch or j, is replaced with a fricative or stop like sh or /d/	<i>"ships" for "chips"</i>	4 yrs.
Alveolarization	When a nonalveolar sound is substituted with an alveolar sound	<i>"tu" for "shoe"</i>	5 yrs.
Depalatalization	When a palatal sound is substituted with a nonpalatal sound	<i>"fit" for "fish"</i>	5 yrs.
Labialization	When a nonlabial sound is replaced with a labial sound	<i>"pie" for "tie"</i>	6 yrs.

Source:

http://mommyspeechtherapy.com/wp-content/downloads/forms/phonological_processes.pdf

ASSIMILATION	Definition	Example	Approx. age of elimination
Assimilation	When a consonant sound starts to sound like another sound in the word	<i>"bub" for "bus"</i>	3 yrs.
Denasalization	When a nasal consonant like /m/ or /n/ changes to a nonnasal consonant like /b/ or /d/	<i>"doze" for "nose"</i>	2.5 yrs.
Final Consonant Devoicing	When a voiced consonant at the end of a word like /b/ or /d/ is substituted with a voiceless consonant like /p/ or /t/	<i>"pick" for "pig"</i>	3 yrs.
Prevocalic Voicing	When a voiceless consonant in the beginning of a word like /k/ or /f/ is substituted with a voiced consonant like /g/ or /v/	<i>"gomb" for "comb"</i>	6 yrs.
Coalescence	When two phonemes are substituted with a different phoneme that still has similar features	<i>"foon" for "spoon"</i>	—
Reduplication	When a complete or incomplete syllable is repeated	<i>"baba" for "bottle"</i>	3 yrs.

SYLLABLE STRUCTURE	Definition	Example	Approx. age of elimination
Cluster Reduction	When a consonant cluster is reduced to a single consonant	<i>"pane" for "plane"</i>	Gone by 4 yrs. without /s/, gone by 5 yrs. with /s/
Final Consonant Deletion	When the final consonant in a word is left off	<i>"toe" for "toad"</i>	3 yrs.
Initial Consonant Deletion	When the initial consonant in a word is left off	<i>"unny" for "bunny"</i>	Usually seen in more severe phonological delays.
Weak Syllable Deletion	When the weak syllable in a word is deleted	<i>"nana" for "banana"</i>	4 yrs.
Epenthesis	When a sound is added between two consonants, typically the uh sound	<i>"bu-lue" for "blue"</i>	8 yrs.

Belle, Ken M. (1995). *Manual of Articulation and Phonological Disorders*. San Diego, CA: Singular Publishing Group, Inc.

Bowen, Caroline. (2011). *Elimination of Phonological Processes in Typical Development*.

Unguisystems. (2008). *Phonological Pattern Suppression by Age*. <http://www.linguisystems.com>

Hedge, M.N. (2001). *Pocket Guide to Assessment in Speech-Language Pathology* (2nd Edition). San Diego, CA:

Pena-Brooks, Adriana, & Hedge, M.N. (2007). *Assessment and treatment of articulation and phonological disorders in children* (2nd Edition). Austin, TX: PRO-ED.

www.mommyspeechtherapy.com

www.littlebeespeech.com



Dysphagia

- Difficulties with the transport & management of food.
 - Oral Phase: sucking, chewing, moving food/liquid
 - Pharyngeal Phase: starting to swallow, closing off the airway to prevent food/liquid from entering the airway (aspiration)
 - Esophageal Phase: relaxing/tightening the esophagus, such that food is transported from the esophagus to the stomach.

Source:

http://www.asha.org/public/speech/swallowing/Feeding-and-Swallowing-Disorders-in-Children/#what_are_f_and_s_dis

Stages of Swallowing:

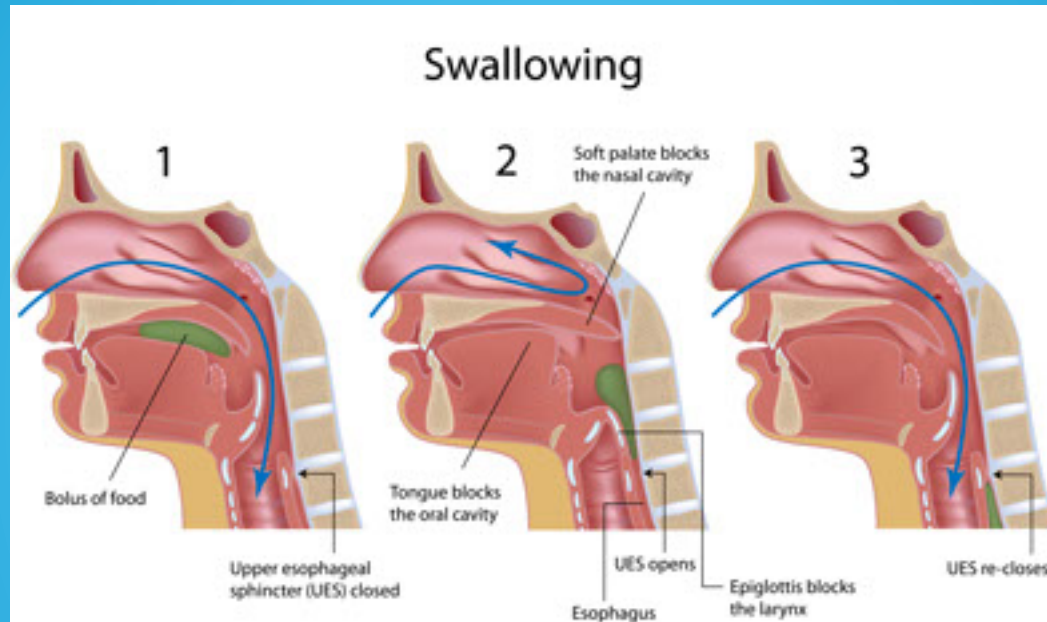


Image source:

<http://blog.talktools.com/2015/why-every-slp-needs-to-understand-dysphagia-by-dr-jennifer-jones-ph-d-ccc-slp-bcs-s/>



Voice Disorders

- ◊ Rate (e.g., too fast/slow)
- ◊ Pitch (e.g., too high/low, monotone)
- ◊ Volume (e.g., too loud/soft)
- ◊ Atypical vocal quality (e.g., strained, hoarse, breathy, nasal)



Fluency

- Disfluent speech is characterized by an interruption in flow/rhythm in syllables, words, or phrases.
- Examples:
 - Hesitations (e.g., "I...am five...years old.")
 - Repetitions (e.g., "I am, I am, five years old.")
 - Prolongations (e.g., "I-I-I-I-I-I-I am, fi-i-i-i-ve year old.")



Serving those with a variety of needs, including/associated with:

- ◊ Autism Spectrum Disorders
- ◊ Developmental Delays
- ◊ Acquired/conditions from birth (e.g., traumatic brain injury, neurological disorders, Cerebral Palsy, genetic syndromes, craniofacial conditions: cleft lip/palate)
- ◊ Hearing loss
- ◊ Learning disabilities



How does an SLP work with children?

- Target classroom goals (e.g., listening/comprehension, vocabulary, reading, writing)
- Increase understanding of lessons
- Service delivery tailored to the needs of a child:
 - monitor/screen if concerns are raised
 - push-in service delivery in the general education setting (e.g., classroom, cafeteria) to target needs (e.g., social skills, support instruction of classroom concepts)
 - pull-out service delivery in the speech setting or a quiet setting to target needs (e.g., pre-teach skills prior to generalizing)



Positive outcomes

- ◊ Reading/writing
- ◊ Learning/thinking
- ◊ Peer/social relations
- ◊ Increased school participation/ child's morale



Signs of Communication Disorder

- Communication milestones are delayed
- Classroom difficulties (e.g., social deficits, not following directions/problems understanding, trouble learning to read/write, inability to express thoughts/ideas)
- Falling below expectations (e.g., test scores, grades)



Signs of Dysphagia (Swallowing Disorder)

- Food/liquid refusal
- Failure to eat a variety of foods
- Prolonged feeding times
- Difficulty chewing, sucking, maintaining lip closure, &/or swallowing
- Excessive drooling &/or spitting up, pocketing of food
- Irritability/reduced alertness during mealtime
- Failure to thrive
- Wet vocal quality, coughing, &/or gagging during meals



What can you do?

- Speak to your child's teacher regarding your observations
- Request strategies for home and develop a plan with your child's teacher
- Request a screen/referral to appropriate supports

General Resources

- American Speech-Language-Hearing Association
- <http://www.asha.org/public/>
- Overview on Hearing/Balance, Speech/ Language & Swallowing, Finding a Professional



AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION



Specific Resources/Tips

- Receptive/Expressive Language
- <http://www.asha.org/slp/schools/prof-consult/norms/>
- Information specific to grade level (i.e., Kindergarten to Grade 5)
- Developmental Milestones



◊ Language/Articulation

- ◊ Talk, read, and play with your child daily.
 - ◊ Model sounds/words
- ◊ Maintain appropriate oral hygiene & have hearing screened, as hearing is linked to language development.



○ Pragmatics

○ www.socialthinking.com

- Articles for parents

○ ASHA

- <http://www.asha.org/public/speech/development/PragmaticLanguageTips/>



○ Swallowing

- http://www.asha.org/public/speech/swallowing/Feeding-and-Swallowing-Disorders-in-Children/#sings_of_f_and_s_dis
 - Additional signs/symptoms, treatment approaches, & information
- <http://swallowingdisorderfoundation.com/wp-content/uploads/2015/09/Chewing-Can-Be-Tricky-2.pdf>
 - Home strategies
- <http://swallowingdisorderfoundation.com/medical-conditions/infants-and-children/>
 - Parent resources, forum, medical conditions impacting swallowing



◊ Voice

◊ Prevention Tips:

- ◊ Hydration

- ◊ Prevent vocal abuse (e.g., shouting)

- ◊ Seek physician's care regarding allergies, sinus, or respiratory infections



◊ Fluency

◊ Strategies:

- ◊ Allow your child the time to speak
- ◊ Try not to speak for you child/interrupt
- ◊ Speak to your SLP regarding what may be considered normal disfluent speech that children grow out of versus truly disfluent speech



References

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