



SOUND DEVELOPMENT AGES

**Ages listed are the latest age the sounds should appear.
Many sounds may develop at earlier ages.**

3	4	5	6	7
P B M N H W	K G T D Y F	ALL 3-4 YEAR SOUNDS	L	CH SH J R Z S V TH

In addition to developmental norms, other considerations for eligibility for speech therapy should include:

- *Intelligibility*
- *Stimulability- ability to make sound(s) with model*
- *Error Patterns (i.e., leaves off final sounds)*
- *Oral motor skills*
- *Impact on social and academic skills*
- *Other disabilities that may relate to speech problems*
- *Structure of oral mechanism*
- *Emerging production of sounds(indicators that the student is developing correct production of the sound)*



Speech-Language Impairment Phonological Processes Developmental Norms

3

**Initial Consonant Deletion
Final Consonant Deletion
Voicing
Devoicing
Consonant Harmony**

4

**Weak Syllable Deletion
Fronting
Backing
Palatal Fronting
Deaffrication
Cluster Reduction (After age 4-6)
Stopping (After age 4-6)
Stridency deletion (After age 4-6)**

5

**Gliding of Liquids
Vocalization (syllabic or postvocalic)
Vowelization**

Considerations for eligibility when addressing phonological processes:

- Error patterns have a 40% or greater occurrence rate
- Phonological patterns are addressed as groups of sounds not individual phonemes
 - Intelligibility
 - Impact on educational performance



SPANISH PHONEMIC INVENTORY

Please remember that dialectal differences exist for each language and should be considered when using the phonemic charts.

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Palatal	Velar	Glottal
Plosive	p b			t d			k g	
Nasal	m			n		ɲ		
Trill				r				
Tap or Flap				ɾ				
Fricative		f		s			x	
Affricate					tʃ			
Glides (Approximant)	w					j		
Liquid (Lateral Approximant)				l				

Reference:

Goldstein, B. (2000). *Cultural and linguistic diversity resource guide for speech-language pathologists*. San Diego, CA: Singular.

Articulation Differences Commonly Observed Among Spanish Speakers
 (Adapted from Celeste Roseberry-McKibbin:
 Multicultural Students with Special Language Needs-2nd Edition)

Articulation Characteristics

Sample English Patterns

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. /t, d, n/ may be dentalized (tip of tongue is placed against the back of the upper central incisors) 2. Final consonants are often devoiced 3. Deaspirated stops (sounds like speaker is omitting the sound because it is said with little air release) 4. Schwa sound inserted before word initial consonant clusters 5. When words start with /h/, the /h/ is silent 6. /r/ is often trilled 7. Frontal /s/ - Spanish /s/ is often produced more frontally than English /s/ 8. Spanish has 5 vowels (a, e, i, o, u). Thus Spanish speakers may produce the following vowel substitutions: <ul style="list-style-type: none"> • ee/I substitution • E/ae, ah/ae 9. Final Consonant Deletion – Spanish words can End in 10 different sounds: a, e, i, o, u, l, r, n, s, d 10. voiced/voiceless /th/ do not exist in Spanish 11. Other substitutions: <ul style="list-style-type: none"> • b/v • y/j (/j/ sound does not exist in Spanish) • s/z • ch/sh • sh/ch • n/ng | <p>dose/doze</p> <p>eskate/skate; espend/spend</p> <p>old/hold; it/hit</p> <p>Some speakers may sound like they have a frontal lisp</p> <p>peeg/pig; leettle/little</p> <p>pet/pat; Stahn/Stan</p> <p>may omit various sounds at the end of words</p> <p>tink/think; dis/this</p> <p>bote/vote; Dabid/David
 yoke/joke; Yeorge/George
 soo/zoo; ros/rose
 chip/ship; wich/wish
 shicken/chicken
 sin/sing</p> |
|---|---|