

Handy Handouts®

Free informational handouts for educators, parents, and students

Nondevelopmental Phonological Processes

by Adrienne DeWitt, M.A., CCC-SLP

An Overview of Phonological Processes



Phonological processes are speech sound errors that occur in a predictable pattern. Common phonological processes occur in most children and are developmentally appropriate, such as saying “tat” for “cat” or saying “top” for “stop.” As children age and as their speech and language mature, these phonological processes eventually disappear. However, some children continue to use phonological processes when most of their peers have stopped. A speech-language pathologist (SLP) can assess and treat persistent phonological processes.

Nondevelopmental Phonological Processes

Many phonological processes are a typical part of development, as defined in [ASHA’s resource on selected phonological processes \[patterns\]](#) or [Handy Handout #66](#), but some are not. Nondevelopmental phonological processes rarely occur and are a sign of a speech sound disorder. Here are some examples:



Initial Consonant Deletion occurs when the initial consonant of a word is omitted.

Ex. “ut” /ʌt/ for “cut” /kʌt/

Glottal Stop Substitution occurs when a consonant is substituted with a sound produced in the back of the throat called a glottal stop (the sharp, middle sound in “uh-oh”).

Ex. “bu-ie” /bʌɪi/ for “bunny” /bʌni/

Backing occurs when velar consonant sounds, such as /g/ and /k/, are used in place of consonant sounds produced in the front of the mouth, such as /d/ and /p/.

Ex. “gip” /gɪp/ for “dip” /dɪp/ or “key” /ki/ for “pea” /pi/



Assessment

Nondevelopmental phonological processes can be a functional speech sound disorder, which has no known cause. But many times they are organic in nature, meaning that there is a known cause of the speech sound errors, such as a cleft palate or a hearing impairment. A speech-language pathologist would provide an assessment to determine what processes are being produced. It is important to determine if the child can perceive the difference between the error sound and the correct production. The SLP would also conduct a thorough background history to determine possible organic causes for nondevelopmental phonological processes, as well as other factors that could contribute to differences in speech, such as dialect differences and considerations for multilingual populations.





Handy Handouts®

Free informational handouts for educators, parents, and students
(cont.)

Treatment

Based on the SLP's assessment, treatment goals and therapy approaches would be recommended. If it is determined that the nondevelopmental phonological processes are functional in nature, the SLP might take a traditional phonological approach, such as phonological contrast approaches (defined in [Handy Handout #181](#)) or the Cycles Approach (defined in [Handy Handout #540](#)). If it is determined that nondevelopmental phonological processes have an organic cause, the SLP may choose to explain how the target sounds are produced. This could include visual feedback (e.g. using a mirror to show tongue placement) and tactile biofeedback (e.g. using a tongue depressor to show tongue placement).



Resources:

Bernthal, John E., Nicholas W. Bankson, and Peter Flipsen. *Articulation and Phonological Disorders: Speech Sound Disorders in Children Sixth Edition*. Boston: Pearson, 2009.

"Speech Sound Disorders- Articulation and Phonology," ASHA, accessed October 7, 2019, <https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589935321§ion=Overview>

For more FREE Handy Handouts®, go to www.handyhandouts.com