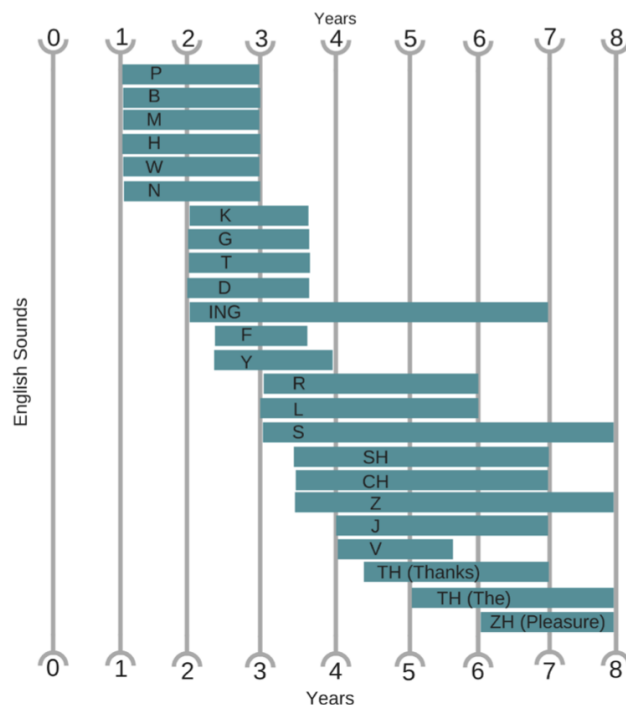**DC READING CLINIC**

Articulation, **or a child's ability to form clear, distinct phonemes and coarticulate them, can affect students' decoding, encoding, verbal production, and more.** Articulation errors can be caused by a wide range of factors: physical difficulty producing the sound, language variation (i.e. the student has not heard the target sound yet in their educational career), or difficulty distinguishing and analyzing phonemes (phonological processing).Articulation difficulty is also developmentally appropriate within the early grades. General Education teachers can keep in mind some guidelines and processes to assess, diagnose, and remediate generalized articulation difficulties.

Guideline 1: Know what is developmentally appropriate.

In general, there is a wide range of articulation development. Many errors through Grade 2 can be considered developmental errors, which means they are normal, age-appropriate errors and do not require speech therapy. Some developmental errors include substitutions (/w/ for /r/ in "rabbit"), omissions (omitting /r/ at the end of "car"), distortions (/fth/ for /th/ in tooth), and/or Additions. Teachers should also keep in mind the educational impact: early in the elementary years, articulation difficulties may not affect achievement, whereas they are more likely to impact achievement later on. As phonemes are the "parking lots" for letters as students learn to decode and read, articulation can certainly affect reading acquisition . Below are the general guidelines for when certain consonant phonemes can be produced. (More information here.)

Speech Sounds Aquisition Chart

Years

| English Sounds | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

P
B
M
H
W
N
K
G
T
D
ING
F
Y
R
L
S
SH
CH
Z
J
V
TH (Thanks)
TH (The)
ZH (Pleasure)

Years

How To Interpret Chart: The beginning of the line indicates the age when 50% of children are able to produce a sound correctly. The end of the line indicates the age when 90% of children are able to say a sound correctly.

References: Based on Sanders (1972)

www.speechtheraptytalk.com

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Guideline 2: Identify *which* phoneme(s) the child confuses or produces incorrectly.

Once you've identified which phonemes are difficult for the child, there are three steps to assist the student:*

    (1) Provide extra models and direct instruction for target sounds

    (2) Consistent visual cues given to child

    (3) Increase response time

For example, if the child was unable to produce the /l/ sound, the teacher could:

    (1) Provide extra models and direct instruction for target sounds:

        (a) Model the articulation of /l/ and have the child repeat

        (b) Say several words with /l/ sound in initial position and have child repeat

        (c) Directly instruct child how to articulate: tip of the tongue presses up on the roof of the mouth behind the teeth

        (d) Have child watch self articulating sound in mirror

        (e) Provide KidLips card

    (2) Consistent visual cues given to child:

        (a) Provide KidLips cards whenever the child is asked to produce or identify /l/ sound

        (b) Point to the teacher's own mouth whenever the child is asked to produce or identify /l/ sound

    (3) Increase response time:

        (a) Allow the child extra time when producing /l/

(More phoneme-specific resources here.)

***Note:** These three quick ways are similar to what a speech language pathologist (SLP) may do through the Cycles Approach. In the Cycles approach, the SLP would (1) review the target sound or word, (2) provide auditory bombardment (the sound over and over), (3) articulation practice, (4) play with the sound, (5) probing questions.

Developmentally Appropriate or Cause for Concern? Early Warning Signs of Dyslexia

From: Shaywitz, S. (2020). Overcoming Dyslexia (Second Edition). Vintage Books.

Children who may be dyslexic might:

- not begin saying their first words until 15 months and may not speak in phrases until after their second birthday.
- experience difficulties in pronunciation- sometimes referred to as "baby talk" -that continue past the usual time. By 5 or 6 a student should have little difficulty saying most words correctly. Some examples: *pisgetti* for *spaghetti*, *lephant* for *elephant*, *pacific* for *specific*.
- have less sensitivity to rhyme. Dyslexic students have trouble understanding the sound structure of language and struggle with taking words apart.
- experience difficulties with word retrieval. This may manifest in talking around a word or pointing instead of speaking.
- have an unusually hard time learning the names and sounds of the letters of the alphabet.

Guideline 3: Know when to pull in a Speech-Language Pathologist

Teachers should ask themselves if the articulation error is causing a negative educational impact. If so, it may be time to pull in the expertise of a SLP. Additionally, if a student has been receiving explicit articulation intervention and not improving, it also may be time to pull in their expertise.

Other Ways to Collaborate With Your SLP

Since SLPs have in-depth knowledge of language and its subsystems (phonology, morphology, and syntax), they can help classroom teachers with prevention, identification and interventions for literacy concerns. Speech and literacy are reciprocal; therefore, students with spoken language difficulties frequently struggle with literacy, and students with literacy difficulties frequently struggle with spoken language.

The strongest recommendation is to Invite the SLP to push in. Research shows that push in services have had positive effects on students' vocabularies, speaking skills as well as phonological awareness (Archibald, 2017).

Your SLP can:

- model teaching Heggerty and other activities that improve students' oral language foundation and phonemic awareness skills
- model the teaching of minimal pairs, both orally and when decoding/encoding (for example, differentiate between *go/though* and *stop/slop*)
- Demonstrate the cycles approach, described above
- model how to use visual cues like KidLips cards, mirrors and pointing out articulatory gestures while teaching phonemes and graphemes or when working on challenging phonemes

Sources:
Archibald, L.M.D. (2017). SLP-educator classroom collaboration; A review to inform reason-based practice. *Autism & Developmental Language Impairments, 2,* 1-17
Farquharsona, K. (2019). It Might Not Be "Just Artic": The Case for the Single Sound Error. *Perspectives of the ASHA Special Interest Groups, 4,* 76–84
Spracher, M. (2000). Learning About Literacy: SLPs Play Key Role in Reading. *The ASHA LeaderSchool Matters.*
Multi-Tiered Systems of Support for Speech and Language, retrieved 2022.
Shaywitz, S. (2020). *Overcoming Dyslexia (Second Edition).* Vintage Books.
Also consulted: Bishop & Adams (1990); Magnusson & Nauclér (1990); Scarborough (1990); Snowling & Melby-Lervåg (2016)