

Communication Chronicles

A publication bringing speech/language tips to your inbox and more

How Do We Produce Speech?

There are four main mechanisms that occur every time we speak:

Respiration - This is when we inhale at the level of the lungs.

Phonation - Sound happens when our vocal cords come together in a wave-like motion to create sound.

Resonation - No two voices sound exactly the same due to the differences in sound vibrations in the pharynx (throat), oral cavity (mouth), and nasal cavity (nose).

Articulation - The shaping of structures in the oral and nasal cavity that manipulates the airflow from the lungs.

We speak on exhalations. The deeper we breathe in, the longer our exhalation will be, and the more words we are able to string together to form utterances. Some children have shallow breathing, resulting in short, choppy utterances. This can impact their ability to communicate fluently.

When we vocalize, our vocal cords come together to produce vibration. If we are not practicing vocal health, it could result in vocal strain, nodules, or polyps to develop on the vocal cords.

As sound travels up through the pharynx, it passes through the oral and nasal cavities. Our soft palate closes off the nasal cavity when we make oral sounds and stays open to allow air to flow to the nasal cavity when we make nasal sounds. Issues with the movement of the soft palate can result in hypernasality and/or hyponasality.

Articulation is the most complex process of all the mechanisms of speech. It involves moving oral structures to create sounds to form words and utterances. If we are unable to move oral structures in correct places and with precision, it impacts the sounds that are produced and the clarity of our speech.

Did you know...
By first grade, most children
can understand about
10,000 words.

Connection between Hearing and Speech

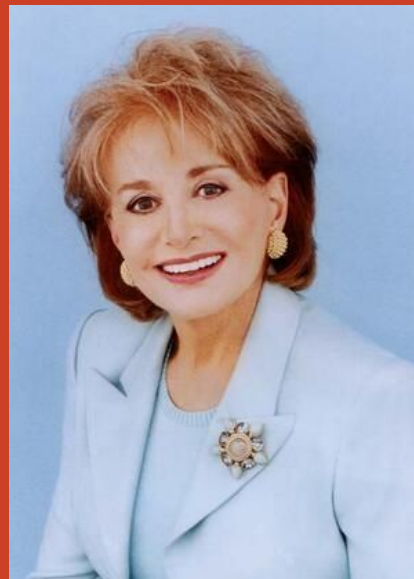
Hearing sounds and words helps children learn to talk and understand. A child with a hearing loss misses out on these sounds. Not all sounds are produced at the same frequency. Children with a hearing loss may struggle to hear quiet sounds, such as s, sh, f, t, th, and k, which are produced at higher frequencies. This may result in articulation errors. Children with hearing loss may also speak too loud or too soft due to not being able to hear themselves. The pitch of their voice may be atypical as well. It is imperative to rule out hearing loss as a potential cause for speech sound errors. If a child fails a hearing screening, they may need to be referred to an audiologist who specializes in testing, diagnosing, and treating hearing loss.

School systems have an important responsibility—they are charged with *identifying, locating, and evaluating* any children who need special education. This is called "Child Find." This is critical to getting them the help they need to thrive in school.

Child Find applies to children from birth to age 21. It can cover children with learning and thinking differences, developmental delays, and other conditions. If you know of any children you suspect of disabilities particularly at the preschool level (at least 3 years old) but also beyond, please reach out to Dr. Kanika Griffin at the Board of Education at 252-426-5471.

Communication Chronicles is a publication of the Speech Language Pathologists of Perquimans County Schools covering a broad range of topics. Reach out to your Speech-Language Pathologists if you have any questions or if you'd like more information.

Celebrity Spotlight



Barbara Walters was the first woman to co-anchor a network news program. Did you know she did so while speaking with a lisp? When she first started working for NBC, Walters was provided with a speech therapist to attempt to correct her lisp; however, she ultimately decided to embrace her speech patterns and has held the role of one of the most iconic television personalities in history.