Therapy Activities: Learning about the parts of the speech machine

We are often surprised by the insights that our students share when their attention is drawn to different parts of the speech production mechanism.

We like to begin by simply asking the child what parts of his body he uses for speaking. You can also ask questions like, “What’s the first thing you do when you want to say something?” and “What is the next thing you do?” By asking questions like, “What is going on in your mouth right now?” or “What is your tongue doing?” you can help children focus on different parts of the speaking process so they can begin to understand what their bodies are doing during both fluent and stuttered speech.

Next, help the child draw the various parts of his body that he uses when he speaks (e.g., Chmela & Reardon, 2001). Begin by helping the child fill in and identify the key parts of the respiratory system (e.g., diaphragm, lungs, ribs, abdominal muscles) using colored pencils or crayons. Show him the different positions these parts of the body take during quiet breathing and during speech breathing.

Finally, do the same thing to show him what happens when he produces voice by drawing a model of the larynx, including structures such as the thyroid cartilage and vocal folds. Continue the process for the oral articulators, labeling structures such as the lips, teeth, tongue, cheeks, hard and soft palates, etc.

For younger children, this activity can be adapted so the list of structures is more basic (e.g., mouth, voice box). Select terms they can use to gain a better understanding of what goes on in their bodies when they talk. Some clinicians have pointed out that learning “grown-up” words for various parts of the body can be a significant motivator for young children (Campbell, 2003), so we do not tend to use simplified vocabulary just because the child is younger. In fact, you can adjust the activity to any age. For example, we like to use science or anatomy textbooks to explore the speech mechanism with older students.

Remember, the child’s drawings and models do not have to be sophisticated or artistic—and neither do yours. They simply need to reflect the basic anatomical components in the speech production system and demonstrate the important physiological relationships between these systems. This will help the child develop a visual picture of what is going on inside his body when he is speaking.

In addition to giving the child a frame of reference when he is exploring different ways of talking, this will also help him develop an appropriate vocabulary that he can use when learning about speech.

You can also help the child make a model of the speech production subsystems using clay or small building blocks. We like children to be able to experience the anatomy and physiology of speech production in a variety of ways. This helps to reinforce the lessons you are teaching them, and it gives children the opportunity to access the information in individualized ways to suit different learning styles.