Pam Marshalla's Practical Therapy Techniques for Apraxia and Dysarthria: *Innovative Strategies for Developing More Intelligible Speech*, reviewed by Tammy Farrell-Walker

Pam Marshalla, MA, CCC-SLP, provided an informative and highly entertaining workshop in Charlottetown on November 4th 2010. She offered insight into strategies for developing more intelligible speech for children with Apraxia & Dysarthria. Throughout the workshop, Pam often differentiated between the characteristics of a motor-speech disorder and an articulation or phonological disorder. She emphasized that a motor-speech disorder affects all four speech movement subsystems: articulation, resonation, phonation, and respiration. Nine areas of priority for motor-speech disorders were discussed in relation to building intelligibility. She pointed out that all areas develop simultaneously and discussed therapy techniques relevant to each of the following topic areas.

1. **Vowels:**
   Vowels are almost always a problem for individuals with motor-speech disorders, thereby significantly impacting overall speech intelligibility. For this reason, Pam recommended working directly on the vowels (as opposed to the traditional approach of targeting consonants), while developing breath support and the voice.

2. **Develop Differential Oral/Nasal Resonance:**
   Hypernasality/hyponasality and/or lack of nasal sounds can severely impact the intelligibility of children with motor-speech disorders; therefore, Pam stressed the importance of helping children increase their awareness of oral and nasal airflow through the use of such "Rapper Snappers" or Nasal Clamps.

3. **Develop Glides & Diphthongs:**
   Children with motor-speech disorders often have face, lip, and tongue mobility problems. Pam differentiated between assistance and resistance methods. Assistance does NOT facilitate movement, whereas resistance helps activate the basic face & lip postures as well as tongue movements. Devices such as lip retractors, and tongue cleaners may aid in resistance exercises.

4. **Prosody:**
   Appropriate prosody significantly boosts intelligibility because it allows an individual with motor-speech disorders to actually sound like s(he) is "speaking the language." It is not usually a problem in articulation or phonology cases. We can facilitate prosody by: exaggerating it from the onset of therapy; ignoring V’s and C's when prosody is the emphasis; placing special emphasis on developing syllable markings; using visuals or gestures to direct the child's voice; using body movements, mirrors, pictures, puppets; using Melodic Intonation Therapy; or singing songs/chanting nursery rhymes with exaggerated syllables and prosody.

5. **Develop the CV:**
   Developing jaw mobility allows the CV syllable and its front consonants to emerge. Again, to create new movement patterns, we should assist movement, resist lowering, and resist elevation. In therapy, to cause the CV to emerge, we should teach a child to hit an embouchure (a mouth posture) and then to move the jaw up and down.
(6.) **Develop Syllable Sequencing:**
Don't focus on the consonants; practice saying syllables distinctly in many words that go beyond the existing syllable shape that the child can't say. Syllable sequencing allows words, phrases, and sentences to increase in length. Think in terms of distinctive features and phonological processes/patterns. Stimulate for ALL sounds, not just developmental norms!

(7.) **Develop Voiceless-ness & Stridency:**
Teach the child how to start the syllable with his/her voice OFF and to turn the voice ON within syllables to facilitate transitioning to the next sound. It's all about making transitions easier. For a motor speech client, the problem of stopping and stridency deletion is one of airflow. The child is having difficulty keeping the airflow going while turning voice on and changing oral position.

(8.) **Develop Oral Stability:**
Therapy must be designed to address the causes or oral instability. Eating activities, posture play, and placement of biting tools can facilitate a closed-lips rest posture and elevate jaw posture during speech tasks. Similarly, over-teaching Long E and eliciting the butterfly position can develop back-laterals tongue stability.

(9.) **Develop Place of Articulation:**
Place is the most refined oral movement skill. Teach "raspberries" early in therapy and use tactile stimulation to help identify, organize, and mark the places of articulation. Correct place of articulation completes the process of developing intelligibility.

To summarize, when working with children with motor-speech disorders, we need to shift our focus from individual phonemes to intelligibility. Don't expect phoneme or word perfection. A wealth of information may be obtained by referring directly to Pam Marshalla's website: [www.pammarshalla.com](http://www.pammarshalla.com).

-Tammy Farrell-Walker