Developmental Apraxia of Speech (DAS)

• Dysarthria = muscle weakness.
• Dyspraxia or apraxia = problems with muscle coordination.
• Adult forms of both of these are clearly linked to some type of neurological damage.
• Childhood forms of dysarthria = various forms of cerebral palsy.

DAS

• Controversial diagnosis.
• Some argue that this condition does not really exist.
• Believe that this is just an extremely severe form of speech delay.
• Almost never see any specific neurological damage.
• See nothing with medical imaging techniques like CT or MRI.

Proposed Definitions of DAS

• Inability to sequence speech movements after exclusion of sensory, cognitive, and language disruptions.
• A motor speech disorder involving deficits in the prearticulatory sequencing of segmental targets.
• Inability of child to perform volitional/imitative productions of sounds and sequences.

Prevalence Estimates of DAS

• 1.3% (Morely, 1972)
• 1.0% (Yoss, 1975)
• .125% (Shriberg et al., 1997)

DAS Formal Tests

• Several available.
• Because we don't have a good sense of what the condition actually is, the criteria used in each test is arbitrary.
• We can't assume that just because it has been published that the diagnosis question has been solved. It has not.
**DAS Clinical Criteria**

- Significant problems with consonant production.
- May see vowel errors (one of the few cases where vowels could be an issue in English).
- Errors increase as length of unit increases.
- Errors often include more than 2 features.
- Errors may or may not be inconsistent (in adult apraxia almost always inconsistent).

- Difficulty with producing sequences involving changing place of articulation.
- May or may not see groping movements.
- May or may not see oral apraxia
  - Problems with nonspeech movements.
- May have history of some ‘neurological event’.
- May have problems with timing and control of nasality and prosody.

**DAS Clinical Criteria**

- Usually have normal nonverbal IQ.
- Usually have normal receptive language skills.
  - Very poor intelligibility means testing expressive language is very difficult.
- Usually have normal hearing.
- Usually don’t have obvious muscle weakness.

**DAS Remediation**

- Want to expand both phonetic and syllable shape inventories.
- Teach new sounds using syllable shapes they already use.
- Teach new syllable shapes using sounds already in inventory.

**DAS Remediation**

- Visual stimuli often helpful.
- Create picture stimuli for each sound and practice in games.
- Combine stimuli to help create sound sequence practice.
- Aim for both accuracy and flexibility.
- LOTS of production practice.