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### Pairing with Motivation

- ▶ Pair yourself with what motivates your child, so you become **The Giver of Good Things!**
- ▶ Avoid asking for any type of performance.
- ▶ Gradually add in a simple, supported task such as placing one puzzle piece in one available opening.

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### Having the ability to imitate

Motor → speech imitation



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### Motor to Speech Imitation

Support imitation with hand-over-hand training, gradually fading the support.



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### Motor to Speech Imitation

- ▶ These steps are not always needed.
- ▶ Some can be skipped.
- ★ **Rapid Motor Imitation Antecedent (RMIA)** training will be discussed.

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### Tolerating tools

(placed in mouth to assist with isolated vowels and consonants)



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### Tolerating Tools

- ▶ It is important to desensitize the child to items placed in their mouth.
- ▶ Gain blowing skills, which are:
  - Important for producing many consonants
  - Needed for breath support when speaking

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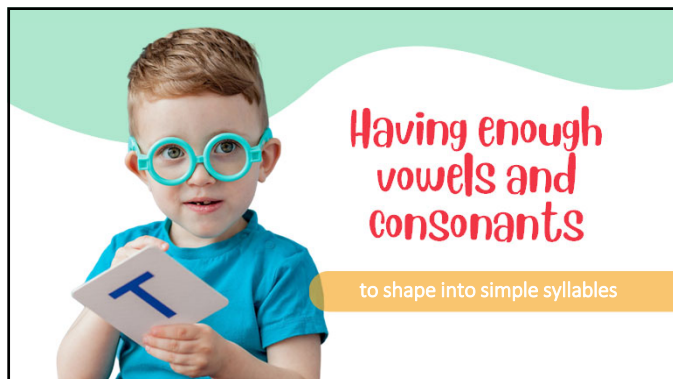
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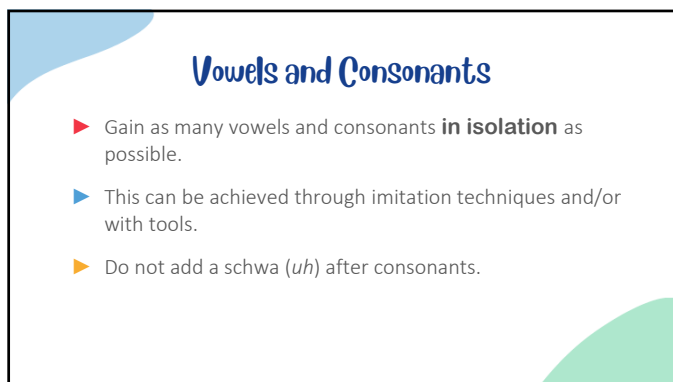
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### First Target Words

- ▶ Attempt to combine the vowels and consonants within the child's repertoire to form simple syllable shapes/words or approximations.
- ▶ These words may or may not be functional, but will help with the practice of speech motor skills.

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### About Skills for Success

- ▶ Some children may become stuck on one of these initial skills for success.
- ▶ We have to persevere with expertise and many trials, which can take from weeks to even months.

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## 2 Does My Child Have Apraxia of Speech?

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**What is Childhood Apraxia of Speech?**

- ▶ Oral motor movements are required to produce and combine consonants and vowels into words.
- ▶ A child with CAS has difficulty executing and/or sequencing those movements when planning **spoken thoughts**.
- ▶ This is opposed to *automatic utterances* such as exclamations tied with emotion, or recitations (alphabet, numbers, days of the week, etc.)

Additional definitions:  
[asha.org](http://asha.org)  
[apraxia-kids.org](http://apraxia-kids.org)

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**Suspected CAS**

- ▶ The diagnosis of CAS can be difficult to make if there are not enough vocal skills to assess.
- ▶ Suspected CAS (sCAS) is sometimes applied.
- ▶ Over time and therapy sessions, a formal diagnosis of CAS can be determined.

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**More on CAS...**

Whether or not CAS characteristics are observed, the **K-SLP** methods are appropriate for any child who struggles to combine consonants, vowels, or syllables to produce words and to maintain their motor plans in connected speech.

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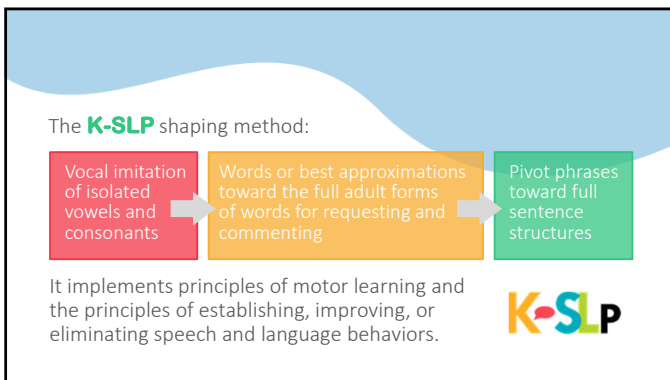
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**What is Shaping?**

Shaping is the process of gradually teaching closer and closer approximations of a new behavior.

It is achieved by:

- ▶ Using reinforcement
- ▶ Using/fading cues

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### Shaping + the K-SLP

- ▶ The **K-SLP** follows the principles of shaping to teach the behavior of speaking.
- ▶ Because shaping methods are often used in teaching new behaviors in ASD, the **K-SLP** shaping methods are a good fit to establish vocal skills, especially for those with minimal vocal skills or unintelligible speech due to CAS.
- ▶ Because not all minimally vocal children will achieve vocal communication, each requires an augmentative/alternative communication (AAC) system.

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- ▶ The type of AAC is typically chosen based on the child's skills and abilities.
- ▶ It is important to consider augmentative/alternative forms of communication and to not rely on each child learning to become a vocal communicator.

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Typically developing toddlers who are just learning to speak rarely begin by using whole words. For example, the word **BOTTLE** might be produced as:

ba  
↓  
baba  
↓  
bado  
↓  
bottle



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Children who struggle to speak may be stuck on approximations much lower than their capability.

Continuously asking them to repeat whole words is **setting them up for failure!**

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**K-SLP Treatment Kits**

- ▶ The **K-SLP** kits were produced to be a visual reference for early syllable shapes.
- ▶ Mastering these should transfer to untaught words within the same syllable shapes.
- ▶ This is assuming the child can produce most consonants and vowels within the syllable shapes chosen.

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Teaching Word  
Approximations

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### Successive APPROXimations

- ▶ When children are unable to produce whole words upon imitation and cues, we shape words with closer and closer approximations until we achieve our target vocabulary.
- ▶ We should always model the words fully and correctly while *working with* the children and when *speaking to* the children.
- ▶ As therapy continues, approximations will continue to change so better approximations are fully reinforced and lesser approximations are no longer acceptable.

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### Word Progression

Ultimately, we work toward using single words for requesting and commenting in the natural environment.

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### Card Examples

The backs of the **K-SLP** cards are only **suggestions**. There are many ways to simplify words, depending upon the child's consonants and vowels.

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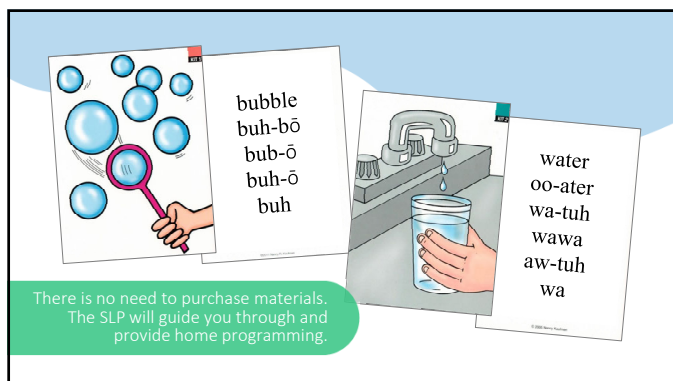
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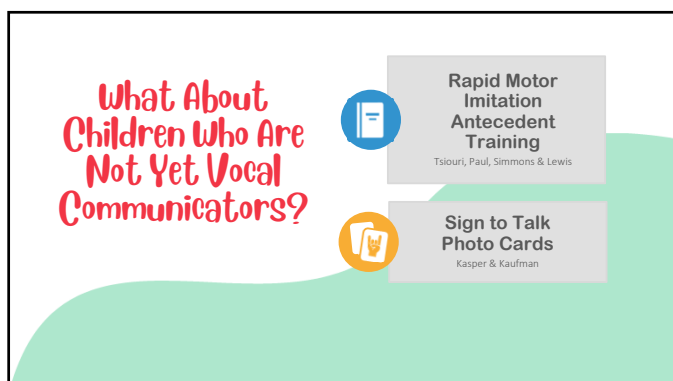
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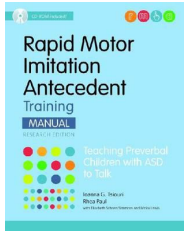
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### Rapid Motor Imitation Antecedent

- ▶ **RMIA** is rooted in the principles of ABA, but has extensive applications with speech-language pathology.
- ▶ It focuses on establishing strong motor imitation skills (rapid, fluent, and generalized) to improve attending, responding, and behavioral momentum to get the child imitating sounds and/or words to request preferred items.



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**RMIA to vocal imitation**

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**Vocal imitation**

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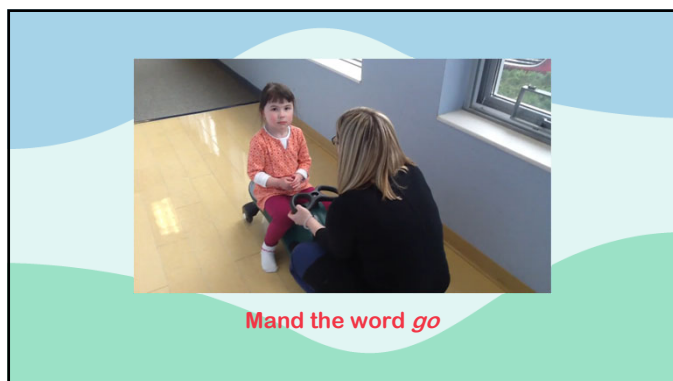
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### Sign to Talk

(Kasper & Kaufman, northernspeech.com)

- ▶ A method to bridge sign language to vocal/verbal communication (especially in ASD).
- ▶ **Sign to Talk** takes a great deal of expertise and technique and is best done within an ABA verbal behavior program with the guidance of an SLP.

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Legos  
lè-gòz  
lè-gò  
wè-gò  
wè-dò  
è-dò

draw  
der-aw  
daw  
aw

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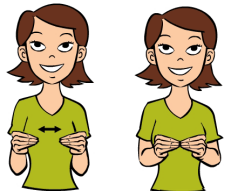
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### Choosing Words to Sign

Very often, the first words or signs SLPs and parents tend to teach are:



more want  
help please again  
(all) done

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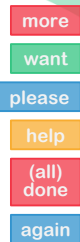
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Although initially effective, these words quickly begin to **lose their power**, unless they are a pivot word in a two-word phrase.

**WHY?**

- ▶ Once these words are taught, there may be less motivation to learn additional vocabulary
- ▶ The child may only learn that when using these single words, good things will probably happen



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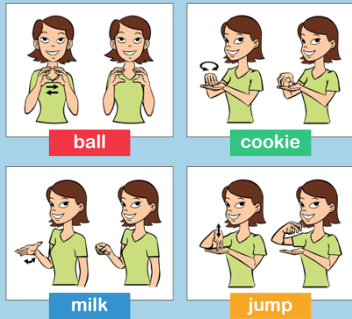
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It is best to teach a **one-to-one sign match** for highly preferred items and activities



ball cookie  
milk jump

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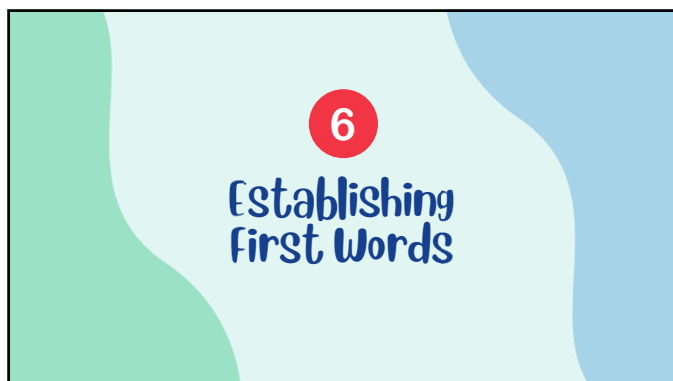
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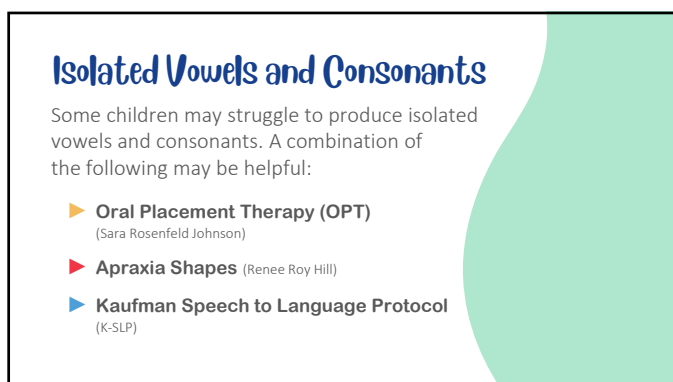
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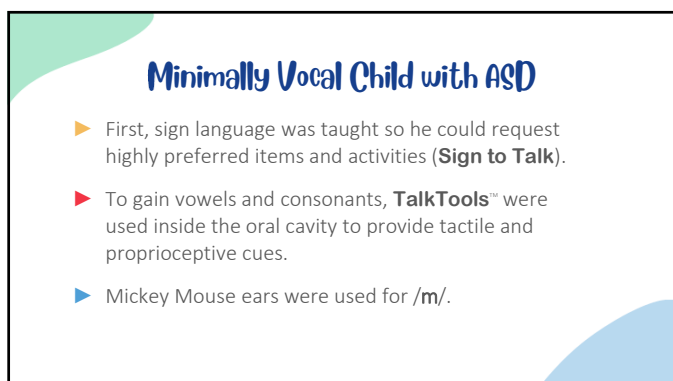
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- ▶ An apraxia tactile tube was used for /ou/ as in *no*.
- ▶ A smaller tactile tube was used for /u/ as in *boot*.  
(Renee Roy Hill)
- ▶ Bite sticks were used for /i/ as in *eat*.
- ▶ The **Talk Tools™** were then faded so that the phonemes were performed with no assistance.

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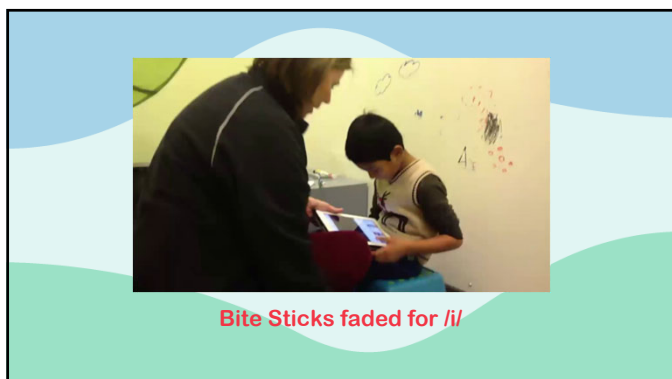
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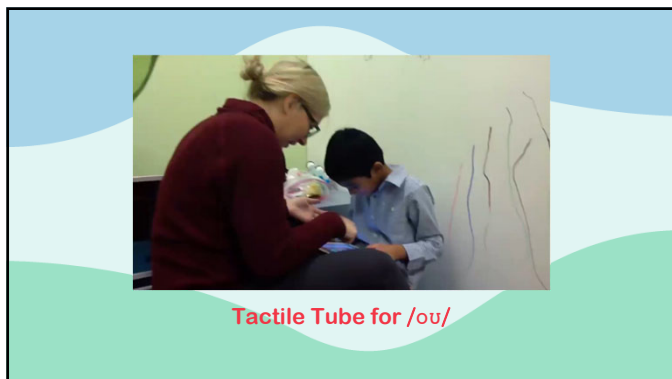
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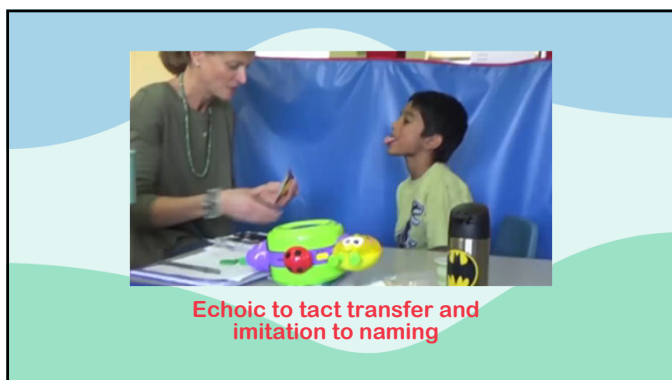
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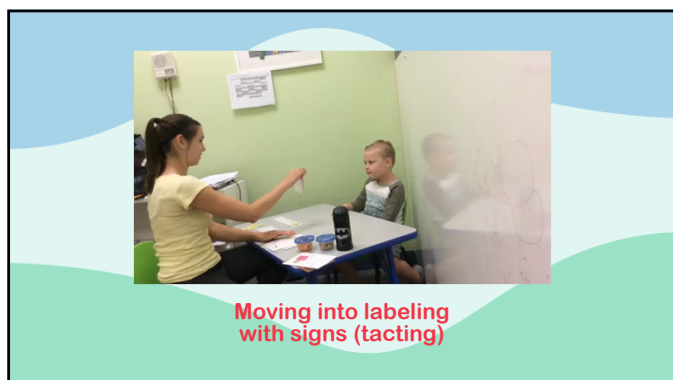
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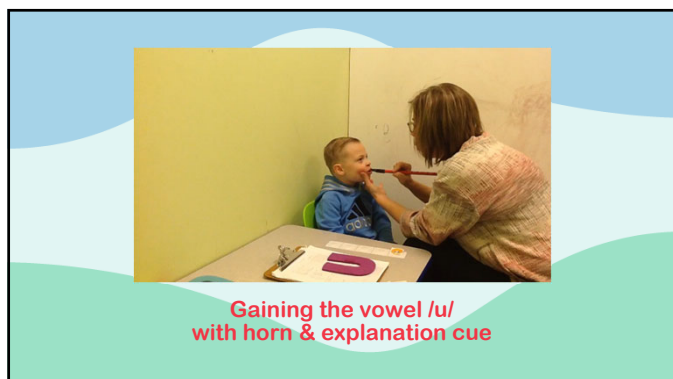
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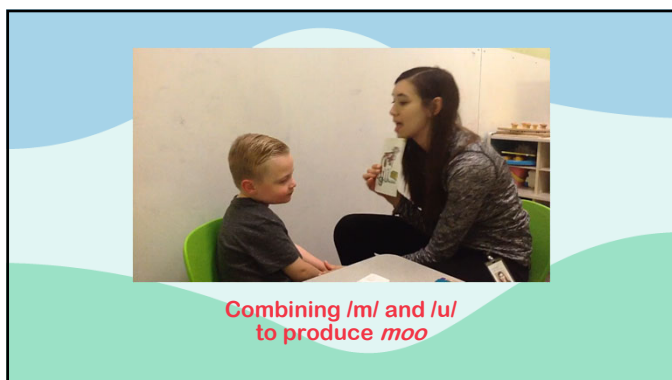
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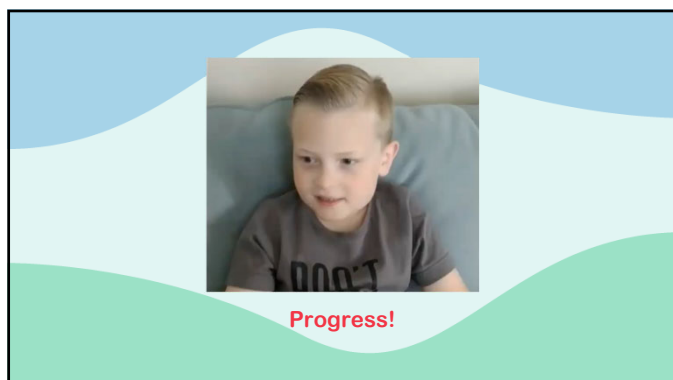
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### More Information

- ▶ **Evaluation and Treatment of Childhood Apraxia of Speech: the Kaufman K-SLP Methods and Behavioral Strategies to Build Vocal Communication**  
(Nancy Kaufman – [northernstpeech.com](http://northernstpeech.com), course e266)
- ▶ **K&K Sign to Talk: Shaping Verbal Language for Individuals with Autism and Other Developmental Challenges (Nouns & Verbs)**  
(Tami Kasper & Nancy Kaufman – available at [northernstpeech.com](http://northernstpeech.com))
- ▶ **Progressive and Systematic Speech and Language Training for Children on the Autism Spectrum**  
(Tami Kasper – [northernstpeech.com](http://northernstpeech.com), course e133)
- ▶ **Rapid Motor Imitation Antecedent** (Tsiouri, Paul, Simmons, Lewis, 2012)
- ▶ **Systematic Approach to Teaching Speech to Non-Vocal Individuals with Autism** (Roy-Hill & Solomon)

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# More Information

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- ▶ **Rapid Motor Imitation Antecedent** (Tsiouri, Paul, Simmons, Lewis, 2012)
- ▶ **Systematic Approach to Teaching Speech to Non-Vocal Individuals with Autism** (Roy-Hill & Solomon)

