

Therapy approaches for speech sound disorders

	Who it's for	How it works	Therapy intensity	Research & resources
Minimal Pairs	Children with mild-moderate, consistent phonological errors	<p>Contrasts a known and unknown sound differing by one distinctive feature (e.g., <i>coat</i> vs. <i>goat</i>).</p> <p>Intervention includes familiarization, perception training, imitation, and independent production in drill-play activities.</p>	Typical dosage is two 30–45-minute sessions per week with a goal of 100+ trials per session, but frequency varies.	<p>– RCTs: Dodd et al. (2009) and Ruscello et al. (1993)</p> <p>– More info: Storkel (2022)</p> <p>– Therapy resources: Minimal Pairs Handbook, SCIP</p>
Maximal Oppositions	Children with consistent phonological errors who are missing 6+ phonemes in their speech sound inventory	<p>A complexity approach similar to minimal pairs, except the known and unknown sounds differ by multiple distinctive features (e.g. <i>meet</i> vs. <i>feet</i>; /m/ and /f/ differ in place, manner, and voicing).</p> <p>Contrasting two unknown, maximally opposed sounds is called Treatment of the Empty Set (see a description here).</p>	(Similar to minimal pairs)	<p>– More info: Storkel (2022)</p> <p>– Therapy resources: SCIP</p>
Multiple Oppositions	Children with moderate-severe, consistent phonological errors, with a collapse to one phoneme	<p>Contrasts the known sound with 2–4 unknown sounds (e.g. <i>tie</i> vs. <i>hi</i>, <i>pie</i>, and <i>try</i>).</p> <p>Intervention includes familiarization, imitation, independent production in play/drill-play, and conversation.</p>	High frequency (3 sessions/week) with 50+ trials per session for 10 weeks to maximize outcomes.	<p>– RCT: Allen (2013)</p> <p>– TISLP reviews on multiple oppositions here and here</p> <p>– More info: Storkel (2022)</p> <p>– Therapy resources: SCIP</p>



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Cycles	<p>Children with multiple phonological errors who are highly unintelligible.</p> <p>May be a good choice for kids with cognitive delays or those who get frustrated by slow progress.</p>	<p>A highly specified approach, with set rules for target selection and ordering. Therapy follows a set routine (including auditory bombardment, multiple production activities, stimulability probes, and a phonological awareness activity), addressing one error pattern at a time in a cyclical fashion with the goal of improving overall intelligibility.</p>	<p>60 minutes/weekly divided among 1–3 sessions. One cycle lasts for 5–16 weeks. Complete 3–4 cycles (or 30–40 hours of therapy) to maximize results.</p>	<p>– Description: Prezas & Hodson (2016)</p> <p>– Review: Hassink & Wendt (2010)</p> <p>– Therapy resource: Cycles Handbook</p>
Core Vocabulary	<p>Children with inconsistent phonological errors</p>	<p>Choose a pool of 70 target words in collaboration with the child, parents, and teachers. Target 10 words every session, focusing on consistency of the child's best production (using drill-based activities), rather than perfect production. Remove target words from the pool when the child can produce them consistently.</p>	<p>Typically, two 30-minute sessions per week for 8 weeks, but 1 or 3 sessions a week may also be effective.</p>	<p>– Description: Dodd et al. (2006)</p>
Complexity Approach	<p>Young children (ages 3–6) with phonological disorders</p>	<p>Target selection principle prioritizing later-developing sounds and clusters to create broad changes in the child's speech sound system.</p> <p>Underlies other phonological approaches (e.g. Maximal Oppositions).</p>	<p>(Varies)</p>	<p>– Ask TISLP: “Complexity approach for speech sound disorders”</p> <p>– Tutorial: Storkel (2018)</p> <p>– Resources: SLPath.com</p>



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Stimulability Approach	Young children (2–4) who aren't yet stimuable for many consonant sounds	Therapy focuses on stimulability and increasing the child's phonetic inventory by reviewing sound character cards and corresponding hand motions (e.g., Coughing Cow, where you place your hand on your throat) and completing turn-taking play activities.	45–50-minute sessions once or twice a week for no longer than 12 weeks.	<ul style="list-style-type: none"> – Description: Miccio & Elbert (1996) – Miccio's Sound character cards
Traditional Articulation Approach	Children with articulation (but <u>not</u> phonological) errors.	Follows a developmental progression , tackling one sound at a time through a production hierarchy (isolation, syllables, words, phrases, sentences, conversation) until mastery.	(Varies)	<ul style="list-style-type: none"> – Elicitation strategies: Secord et al. and Caroline Bowen – Apps: SATPAC, staRT
Naturalistic Approaches	Young children with co-occurring speech & language disorders who are unlikely to participate in drill or drill/play-based therapy	Add speech recasting to natural play activities (naturalistic recasting), or add phonological emphasis to Enhanced Milieu Teaching (EMT+PE)	(Varies)	<ul style="list-style-type: none"> – TISLP Reviews on EMT+PE: here and here – More info: Kaiser et al. (2017)
Meta-phonological Approaches	Children at-risk for or diagnosed with literacy disorders	<p>Target children's explicit awareness of sounds' distinctive features, and/or working on letter-sound knowledge and phonemic awareness.</p> <p>Specific approaches include Metaphon, Integrated Phonological Awareness Intervention, and LiPS.</p>	<p>(Varies)</p> <p>Is a supplement, not a replacement, for direct work on speech in most cases.</p>	<ul style="list-style-type: none"> – Description: Metaphon – TISLP Review: LiPS – Free phonological awareness resources

This free download accompanies [The Informed SLP's](#) research review "[Everything you want to know about treatment approaches for speech sound disorders.](#)" This supplemental document and the review are free to read and share.

