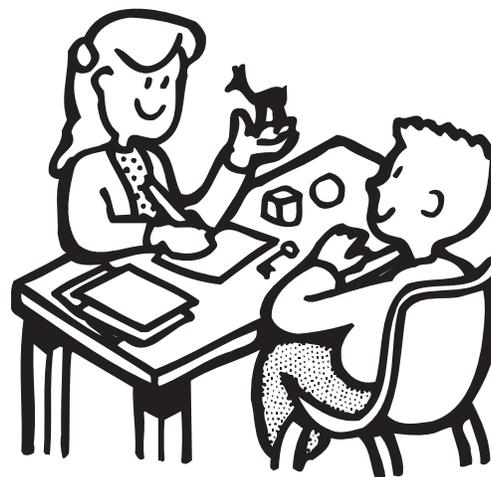


Phonological Approaches to Developing Correct Sound Production

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Phonological processes are the patterns that young children use to simplify adult speech. All children use these processes while their speech and language are developing. For example, very young children (ages 1 to 3) may say “wa wa” for “water” or “tat” for “cat.” Other children may leave out the final sound in words (for example, “pi” for “pig” or “ha” for “hat”). Up to age 3, these are appropriate productions. As children mature, so does their speech, and they stop using these patterns. By age 5, most children stop using phonological processes, and their speech sounds more like that of the adults around them.



Some children continue to use these processes beyond an appropriate age, and their speech may become hard to understand as their vocabulary increases.

Phonological approaches provide a systematic and efficient method for removing error patterns in a child’s speech. This handout discusses four phonological approaches—Minimal Pairs, Multiple Oppositions, Maximal Oppositions, and Treatment of the Empty Set. All of these approaches are evidenced-based and may significantly reduce the time that unintelligible children spend in treatment.

Four Types of Phonological Approaches

Minimal Pairs

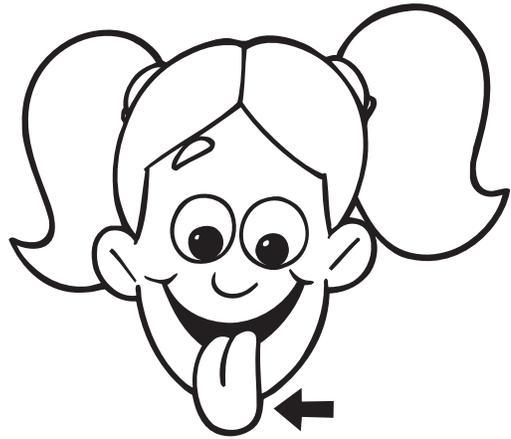
Minimal Pairs consists of two words that differ in pronunciation by only one sound or feature that ultimately changes the meaning of a word. For example, if the phonological process you are targeting is final consonant deletion, one of the minimal pairs presented in therapy could be “bee” and “beep.” First children must learn to hear the difference between the two words, and then learn to say them.

Why use Minimal Pairs?

Using Minimal Pairs allows the therapist to take advantage of different meanings that exist when a child pronounces both “bee” and “beep” as “bee” or “tie” and “dye” as “tie.” The pairs presented contain one sound that the child is able to produce and a target sound. In addition, the therapist can focus on key elements such as place of articulation, the presence or absence of voice, and how a sound is made.

Multiple Oppositions

Multiple Oppositions is similar to Minimal Pairs. However, it features two to four contrastive pairings of a student's error with several target sounds across a rule set. For example, if the student substitutes sounds produced in the front of the mouth (such as /d/) with a sound produced in the back of the mouth (such as /g/), the therapist can select up to four target sounds to reduce this phonological process. The therapist may have the student produce words with the initial sound in the front of the mouth ("door," "four," "chore," and "store") to reduce the phonological process of backing.



Why use Multiple Oppositions?

Just as Minimal Pairs allows therapists to take advantage of different meanings of words that exist when a student produces words, Multiple Oppositions does the same in chunks. These chunks increase exposure to multiple sounds at once, resulting in faster generalization of sounds across a rule set. This will increase the number of sounds a student can produce and decrease sound errors or the amount of time a student receives therapy.

Maximal Oppositions

Maximal Oppositions are pairs of words that differ by multiple elements among sounds. For example, one treatment set that could be presented in therapy is "my" and "dye," where the initial consonant differs in where and how it is made.

Why use Maximal Oppositions?

When developing their speech, children focus on the wide differences between sounds. This approach gives them the opportunity to contrast letters that differ by various elements including how a sound is made, where a sound is made, and the presence or absence of voice at the same time. The pairs presented contain one sound that the child is familiar with and a target sound.

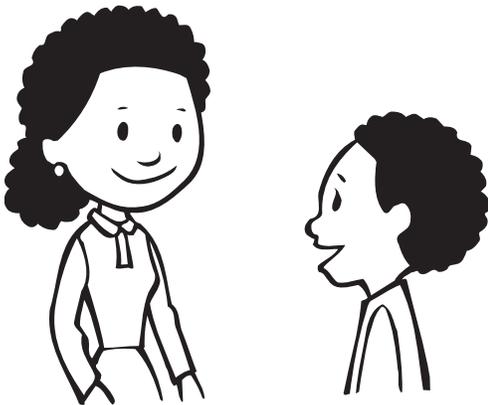
Treatment of the Empty Set

Treatment of the Empty Set consists of word pairs of two target sounds that the child is unable to say. For example, one treatment set that could be presented in therapy is “rye” and “dye.” The presented pairs each contain a target (unfamiliar) sound.

Why use Treatment of the Empty Set?

Using two unfamiliar target sounds will help children learn new sounds and words simultaneously, therefore improving their language and vocabulary. Overall, this will help children become more intelligible.

Fun Activities Using Phonological Approaches



Following is a list of activities that you can do at home to encourage your children to play with sounds and words.

- Create or collect a deck of cards for the game “Go Fish” that have pairs of identical words/pictures and minimal contrast words/pictures. For example, a pair would be “pie” (or a picture of a pie) and “bye” (or a picture of someone waving “bye”). The object of the game is to have the child make pairs for the cards in his hand with identical pictures by asking the other player, “Do you have (a ‘pie’ or someone waving ‘bye’)?”
- Write open-ended sentences that include sounds the child is familiar with, but target sounds the child is unfamiliar with or has difficulty producing. Use picture cards if necessary. For example, if the targeted phonological process was prevocalic voicing, one sentence may be “The *pig* is _____ (big).”
- Gather a bunch of pictures that includes target sounds and sounds the child is familiar with. Have the child find a card, name it, find its matching pair, and name that card, too.

Resources

Williams, A. Lynn (2006). *SCIP - Sound contrasts in phonology: Evidence-based treatment program*. Greenville, South Carolina: Super Duper Publications, Inc.

Gordon-Braman, M and Weiss, C. E. (2007). Clinical management of articulatory and phonologic disorders. Retrieved October 1, 2008, <http://books.google.com/books?id=txBplylhx8c>

Phonological approaches to developing correct sound production. (2003) Retrieved October 1, 2008, <http://www.overtonspeech.net/PhonologicalApproach.html>

Worthington, Colleen K. (2001). *Treatment resource manual for speech-language pathology*. 2nd Edition. Canada: Delmar, a division of Thomas Learning, Inc.

Helpful Products

The list of Super Duper® products below may be helpful when practicing or doing activities related to phonological approaches. Visit www.superduperinc.com or call 1-800-277-8737. Click the links below to see the product description.

Photo Phonology Minimal Pair Card Set™

Ask for Item #FOF99

www.superduperinc.com/products/view.aspx?pid=FOF99

Read Aloud Minimal Contrast Stories with Activities™

Ask for Item #BK235

www.superduperinc.com/products/view.aspx?pid=BK235

Say and Do® Phonology Games

Ask for Item #GB56

www.superduperinc.com/products/view.aspx?pid=GB56

SCIP - Sound Contrasts in Phonology™

Ask for Item #TPX30001

www.superduperinc.com/products/view.aspx?pid=TPX30001

Webber® Photo Phonology Minimal Pair Cards Reproducible Fun Sheets and Bonus CD-ROM™

Ask for Item #BK320

www.superduperinc.com/products/view.aspx?pid=BK320