

Online Supplemental Material

Description of Instruction

Initial Sound Matching (5 minutes)

Attention through alliteration. The clinician draws attention to the initial sound of words by bombarding the child with words beginning with the same sound. The clinician explains that she will say several words and that the child must say the beginning sound of all of the words. The clinician:

1. says each word while emphasizing the first sound.
2. has the child imitate each of the clinician's productions.
3. at the end of the set, prompts the child to indicate the beginning sound of all words in the set.
4. confirms a correct response.
5. points out that the words are written with the same first letter.

If the child responds incorrectly, the clinician:

1. points to the initial letter in the set of written words.
2. models the correct response by pronouncing the first sound.
3. tells the child to listen carefully for that first sound.
4. repeats each word while pointing to the first letter and pronouncing the first sound with greater emphasis.
5. has the child imitate the clinician's production.
6. at the end of the set, offers the child another opportunity to indicate the first sound.
7. confirms or models the correct response.
8. moves on to the next set.

Picture worksheet. The clinician explains that the child must look at the pictures, say the first sound of each word in the pictures, and then name the two words that begin with the same sound. The clinician first models the task. The clinician:

1. presents a series of pictures and names the words.
2. pronounces the first sound in each word.
3. repeats the two words that share the same initial sound.
4. uncovers the words written underneath the pictures and points out whether or not the two words are written with the same first letter.
5. then asks the child to follow the clinician's model with the next set of pictures.

If the child responds incorrectly, the clinician:

1. pronounces and has the child imitate the target first sound.
2. tells the child to listen carefully for that first sound.
3. repeats the next word while pronouncing the first sound with greater emphasis.
4. has the child imitate the clinician's production.
5. asks the child if the word contains the target sound.
6. confirms a correct response/corrects the child by repeating the target sound and responding that the word does not start with that sound.
7. continues steps 1–6 until both words beginning with the target sound are named.
8. uncovers the words written underneath the pictures and points out whether or not the two words are written with the same first letter.
9. continues with the next set to present increased exposure to the task and opportunities for success.

Final phoneme matching

Final phoneme matching is not taught as an isolated skill, based on the literature. Instead, the clinician reinforces children's ability to identify both *first* and *last* sounds during the segmentation training.

Blending (10 minutes)

Picture puzzles. The clinician explains that she is going to say the sounds in words and that the child must connect the sounds to produce the complete word. To teach this skill, the clinician presents pictures with their corresponding words written underneath. There is one puzzle piece for each targeted sound (2–4 syllables or phonemes) and its corresponding written letters. The clinician first models the task. The clinician:

1. points to each puzzle piece and counts the number of sounds in the word.
2. pronounces each sound once the child puts the pieces together to form the complete picture.
3. moves her finger left to right over the letters while connecting the sounds slowly to produce the complete word.
4. asks the child to follow the clinician's model for the next picture, with the clinician pronouncing the sounds for each new word.

If the child responds incorrectly, the clinician:

1. pronounces and has the child imitate the sounds.
2. provides hand-over-hand cues, moving the child's finger left to right over the letters while she and the child connect the sounds verbally in unison.
3. gives the child another opportunity to produce the complete word unassisted.
4. confirms or models the correct response.

5. repeats these steps if necessary.
6. continues with the next word to provide increased exposure to the task and opportunities for success.

Pennies. The clinician explains that she is going to say the sounds in words and that the child must connect the sounds together to produce the complete word, but that the pennies now represent the sounds. This task is similar to the previous task, but the picture and letter support is removed, thereby ceding more responsibility to the child. Word pairs are included to maximize children's chances for success. There is one penny for each targeted sound (2–6 phonemes).

The clinician first models the task. The clinician:

1. points to each penny and counts the number of sounds in the word.
2. pronounces each sound.
3. moves her finger left to right over the pennies while connecting the sounds verbally to produce the complete word.
4. asks the child to follow the clinician's model for the next word, with the clinician pronouncing the sounds for each new word.
5. indicates when only one sound changes for the next word.

If the child responds incorrectly, the clinician:

1. pronounces and has the child imitate the sounds.
2. provides hand-over-hand cues, moving the child's finger left to right over the pennies while she and the child connect the sounds verbally in unison.
3. gives the child another opportunity to produce the complete word unassisted.
4. confirms or models the correct response.
5. repeats these steps if necessary.

6. continues with the next word to provide increased exposure to the task and opportunities for success.

Segmenting (10 minutes)

Picture puzzles. The clinician explains that she is going to say the complete word and that the child must say each sound in the word. The same familiar stimuli from the blending training are also used for segmentation training to maximize children's chances for success. The clinician first models the task. The clinician:

1. presents the word puzzle while saying the complete word.
2. points to each puzzle piece while counting the number of sounds in the word.
3. pronounces each sound in the word while pointing to the letters on each puzzle piece.
4. reinforces the child's understanding of *first* and *last* sounds by identifying and repeating these sounds.
5. asks the child to follow the clinician's model for the next picture, with the clinician providing the name for each new word.

If the child does not respond correctly, the clinician:

1. pronounces and has the child imitate the complete word.
2. provides hand-over-hand cues while she and the child pronounce each sound in unison.
3. gives the child an opportunity to repeat the sounds unassisted.
4. confirms or models the correct response.
5. repeats these steps if necessary.
6. continues with the next word to provide increased exposure to the task and opportunities for success.

Pennies. The clinician explains that she is going to say the complete word and that the child must say each sound in the word, but that the pennies now represent the sounds. This task is similar to the previous task, but the picture and letter support are removed, thereby ceding more responsibility to the child. The same familiar stimuli from the blending training as well as word pairs are used for segmentation training to maximize children's chances for success. The clinician first models the task. The clinician:

1. pronounces the complete word.
2. points to each penny while counting the number of sounds in the word.
3. pronounces the individual sounds in the word while pointing to each penny.
4. asks the child to follow the clinician's model for the next word, with the clinician providing the name for each new word.
5. indicates when only one sound changes for the next word.

If the child does not respond correctly, the clinician:

1. pronounces and has the child imitate the complete word.
2. provides hand-over-hand cues while she and the child pronounce each sound in unison.
3. gives the child an opportunity to repeat the sounds unassisted.
4. confirms or models the correct response.
5. repeats these steps if necessary.
6. continues with the next word to provide increased exposure to the task and opportunities for success.