

# Introduction

Dyson, 1988, found that young children with typically-developing articulation vacillated in their acquisition of correct sound production from one sound to another. McReynolds and Bennett, 1972, found that the key to generalization and increased intelligibility is to target an optimal *pattern*, master it, and move on to the next optimal pattern. These studies and others led Hodson and Paden, 1991, to develop the "cycles approach" to articulation therapy, an approach that targets phonological patterns to be treated in 60 minutes of therapy for two to five hours of therapy per cycle. Today, this method is among the best practices for articulation therapy.

Bishop and Adams (1990) posit that children's speech must be 100% intelligible by age 5.6 in order for them to become successful readers. Children with intelligibility lower than 100% were found to experience difficulty with decoding and spelling.

Children develop speech intelligibility at different rates. However, an accepted guideline is 2-year-olds 50%, 3-year-olds 75%, and 4-year-olds 100%. These percentages do not mean that articulated speech is accurate. They simply mean that an unfamiliar listener would understand a certain percentage of the child's speech at a certain age (Coplan & Gleason, 1988).

This research, and more, made an excellent case for us at LinguiSystems to develop a product NOT to improve articulation but to improve intelligibility. Some children with motor speech disorders or mild to moderate apraxia will never gain precise articulation, but they can achieve 100% intelligible speech. Our approach to intelligibility therapy is simple: lots of fun auditory bombardment, lots of self monitoring, and lots of encouragement for self-correction in a three-tier system.

## ○ Step 1 – Tier 1

Choose the sounds that most impact your student's intelligibility, and target them in Tier 1.

Tier 1 uses auditory bombardment to teach single consonant sounds. Auditory bombardment has been shown to help increase children's intelligibility (Hodson, 2011; Rvachew & Brosseau-Lapre, 2012). Severely unintelligible students may benefit from instruction within every unit of Tier 1. Other students may need instruction in only a few of these units.

At the Tier 1 level, we supply the student with the most uncomplicated examples of the target sound. Target sounds are underlined so you can easily find them, but blended sounds are not. Our intent is to establish a clear understanding of the target sound in Tier 1 before introducing blended sounds in Tier 2.

Teach your students the target sounds as you read the story. Ways to highlight the target sounds include increasing your volume, decreasing your pace, making eye contact with the student after reading the target sound, and/or pointing to portions of the picture that highlight the sound.

After you read the story, present the activities and stimulus items. Some stimulus items focus on teaching while others check for comprehension. Adapt to your student's needs when choosing the manner in which you present the items.

## ○ Step 2 – Tier 2

Choose the sounds that most impact your student's intelligibility, and target them in Tier 2.

Tier 2 teaches the subtleties of blended sounds using auditory bombardment. Both blended and single consonant sounds are underlined in these activities.

Teach your students the target sounds as you read the story. Ways to highlight the target sounds include increasing your volume, decreasing your pace, making eye contact with the student after reading the target sound, and/or pointing to portions of the picture that highlight the sound.

After you read the story, present the activities and stimulus items. Some stimulus items focus on teaching while others check for comprehension. Adapt to your student's needs when choosing the manner in which you present the items.

## ○ Step 3 – Tier 3 (where appropriate)

Tier 3, Word Position, features twelve pictured words that contain the target sound in either the initial, final, or medial position. Since research has shown that children focus on learning to say words as whole units (Velleman, 2002), Tier 3 begins by teaching the target sound in phrases and systematically narrows your instructional focus to the word, syllable, and isolated sound.

## ○ Step 4 – Rate, Quality, Pitch, and Volume

Rate, quality, pitch, and volume are key features which can impact overall intelligibility (Mefferd & Green, 2010). Use the exercises in this unit to improve these features. The exercises (found on pages 196-197) can be used at any time during the course of therapy.

# Introduction, continued

## ○ Step 5 – Carryover Exercises

Carryover is an important step for dismissal from speech therapy. Therefore, we've included four carryover exercises at the end of the Early Developing Sounds section and at the end of the Later Developing Sounds section. These exercises review all of the sounds in their respective section and target those sounds in initial, medial, and final word positions and in consonant clusters.

Use the carryover exercises to improve your student's overall speech intelligibility. Each exercise includes a picture scene, a page of questions about the scene, a list of target words, and an answer key.

### **Picture Scenes**

We recommend you use colored versions of the scenes with these exercises, as color words are targeted in some questions. You may print the colored scenes from the enclosed CD-ROM.

### **Questions**

The questions are presented in the following format:

- Tell me a story about this picture.
- wh- questions (eight of each: who, what, where, when, why, how)
- four category questions (Tell me three \_\_\_\_\_.)
- two inference questions
- two compare/contrast questions
- two paraphrasing questions
- two problem-solving questions
- two social communication questions
- two sequencing questions
- two definition questions
- two attribute questions
- two predicting questions
- two opinion questions

### **Target Word List**

The Target Word List includes words that are pictured in the scene. These words contain the target sound in all word positions and in consonant clusters. Many of the words are targeted in the questions.

### **Answer Key**

An answer key with example answers is included for your convenience. You should accept all logical answers, as the main goal of these exercises is to measure your student's speech intelligibility at the conversational level.