

# Introduction

Prior to a neurologic incident, many speakers utilize an auditory feedback system to monitor whether or not a word is pronounced correctly. When a word, syllable, or phoneme is incorrectly pronounced, the speaker hears himself and is usually able to modify the physical components so it “sounds right” on the next production.

After a neurologic incident, the client may or may not be able to identify if a word, syllable, or phoneme sounds right. He is often unable to execute the physical modifications necessary to produce a correct or closer approximation of the sound or word. Impairment to these identification and modification systems can be attributed to apraxia or dysarthria, compounded by aphasia.

Success can occur when a client learns to use all three of the systems available for feedback in conjunction with therapeutic models provided by the therapist. The effects of apraxia can be remediated or compensated for by the client’s learning to look, listen, and feel. Initially, the process will be highly conscious and intentional, but as skills improve, there will be transference to automatic, unconscious use of the three modalities for identification and modification.

In summary, the underlying purpose of the exercises in *The Source for Apraxia Therapy* is to help the client transfer from an auditory feedback system to a visual-auditory-kinesthetic system. The emphasis is to utilize all possible feedback by looking, listening, and feeling.

The initial focus of therapy is on imitation of the clinician until feedback systems are firmly established. The exercises progress from imitation to self-identification and self-modification using the feedback systems as speech intelligibility, fluency, and prosody are improved. The exercises also facilitate articulation, co-articulation, and compensation.

As you begin working with your clients, approximations are acceptable. Do not let your client make mistake after mistake in an attempt to produce a target phoneme. Provide a model at all times. It’s imperative that the nerves and brain learn the correct actions necessary for correct production of a sound. Therefore, you want all messages sent to the brain to be as correct as possible. In addition, stress to the client that productions are to be made with as little effort as possible.

When a client is having an apraxic difficulty, the natural tendency will be for the client to put more effort into his attempt, which invariably worsens the production. Provide the client with visual and verbal cues to reduce the intensity of his attempts. Watch his body posture so it remains susceptible to speech production. If the client begins leaning forward, looks tense, and gives the overall appearance that he is “tight,” speech attempts will worsen.

Cue the client to sit back and to relax the effort he’s putting into his attempts. Initially, the client will require frequent cues, but as he becomes more aware of how his speech improves when he’s relaxed, he’ll begin to make self-initiated changes when he places too much physical effort into his attempts. The client will begin to learn that the more energy and effort he places on his speech, the errors will increase, and that he needs to shift to an effortless type of response.

The goal of this program is to progress to preciseness. Focus on target phonemes when working on specific phoneme groups, and ignore the rest of the word's intelligibility. As your client learns each phoneme group, include it in future exercises. For example, after a client has mastered bilabials, expect them to be articulated correctly when the client is working on labio-dentals. Provide him with verbal and visual feedback as needed during those times, as he may need a reminder that a /b/-initiated word requires the lips to be together.

The exercises that follow the phoneme groups focus on:

- volume, rate, and resonance (indirectly)
- prosody
- pitch
- co-articulation

Not all of the words in *The Source for Apraxia Therapy* will be familiar to your clients. The words have been chosen so they can be sounded out phonetically, regardless of whether the definition is known.

This book can be used with clients who have:

- apraxia
- dysarthria
- dysfluency
- other articulation disorders
- pronunciation difficulties (ESL)
- articulation difficulties due to a hearing impairment
- esophageal speech
- difficulty with paralinguistics and nonverbal speech skills
- neurological disorders

*The Source for Apraxia Therapy:*

1. includes a phoneme section grouped by mode of articulation and visibility
2. focuses on the initial position of phonemes to improve the feedback loop to include auditory, visual, and tactile/kinesthetic input
3. addresses medial and final positions indirectly through co-articulation in multisyllabic words, phrases, and sentences
4. uses extensive drills to incorporate paralinguistics and skills beyond the word level
5. provides exercises arranged for various modes of presentation:
  - clinician reading and client imitating
  - client reading
  - client looking at the word, then getting a model from the clinician prior to imitation

6. includes therapeutic suggestions for sessions
7. provides a Therapy Tracking Chart to help you keep track of where you are in therapy.

You'll be able to use the exercises in *The Source for Apraxia Therapy* in a variety of ways. Adapt them to meet the needs of your clients. Provide reinforcement and encouragement for each accomplishment achieved in therapy, and for reports from people in the client's life concerning the successful spontaneous verbalizations which will begin occurring at home.

The client will find his accomplishments rewarding because there is much internal frustration that results from being unable to verbally communicate. Whenever possible, work with home members so they can fully understand the modeling process and can cue their family member when he's attempting to force words out by increasing his efforts. As the apraxia is decreased, you can focus on reducing aphasia, if present.

Even though patterns of apraxia are similar from client to client and articulation therapy can be repetitious, time-consuming, and challenging for the client, there will be a great sense of accomplishment as the client becomes a functional communicator once again.

Kathy