# A TRAINING PROGRAM

## **FOR**

# CORRECTION OF TENSE VOICE PRODUCTION

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#### NOTE TO THERAPIST

This program is designed for use with students who exhibit severe to moderate vocal tension. Tension is defined as a voice quality identified with excessive strain involving respiratory and laryngeal dynamics. Excessive strain may be evident in the articulatory, phonatory, and aerodynamic aspects of speech production.

This program helps the student learn to effectively coordinate respiration, phonation, and articulation. To learn this coordination, the student proceeds through controlled objectives that constantly build on previously established skills.

The overall sequencing of tasks involves three basic steps. The first step is student comprehension of the purpose for training. This includes an understanding of the basic processes of respiration and phonation and how tension adversely effects these normal processes. The student then learns to identify the presence of tension and to voluntarily reduce tension when producing a vowel. The voluntary reduction of tension is then systematically practiced on vowels, syllables, and phrases. This practice facilitates the generalization of relaxation to various articulatory features.

### PROGRESSION THROUGH PROGRAM

The program is set up with a linear progression through 31 objectives. Each objective is comprised of one to three exercises. Probes are inserted throughout the program to enable a student to bypass activities for which he already has the skill. There are primary and secondary probes. The five primary probes (Probes 1-5) test the student's ability to generalize the use of a relaxed voice to increasingly complex contexts. The six secondary probes (Probes A-F) test the student's ability to repeat specific phonemes within a syllabic context without tension. The utilization of each probe is explained as it occurs in the program. In addition to the probes which may channel the student through the program at an accelerated rate, instructions are also included for looping back to previous exercises when a student has difficulties with a new skill or fails to maintain a previously established skill.

#### SUCCESS ON A TASK

Criteria for success are stated for each exercise. The criteria state expectations for performance and for self-evaluation of performance. The performance aspect is determined by the therapist. At the outset of the program, the therapist should help the student attain the best possible voice. This should then be the reference for accepting or rejecting subsequent productions. Consistency in judgment is of utmost importance. Tape recording student productions may be beneficial for monitoring decisions to accept or reject responses. The development of self-monitoring skills is crucially important if the student is to successfully alter his vocal productions. This expectation should be firmly established early in the program.

### USING THE RESPONSE FORM

Each response to an item should be evaluated by the therapist and the student. These evaluations should be indicated on the record sheet. At the completion of a trial (which consists of one attempt on each item) the evaluations should be tallied to determine if the student meets criterion. If the student fails to meet criterion, he returns to the beginning of the exercise and begins a second trial. This procedure continues until the student succeeds. Responses for up to five trials may be evaluated on one form. However, the number of trials necessary to achieve criterion may exceed five.

### **FACILITATING CARRY-OVER**

Whenever possible, encourage and reinforce the use of a relaxed voice during conversational speech. A good carry-over activity is for the student to practice the target phrases within a sentence. Another possibility is to progressively increase the length of time or number of words the student should speak without tension. The development of self-monitoring skills should be strongly emphasized.

#### NOTE TO STUDENT

You are in this class to try to improve your speech.

This semester you will be following a special program. This page explains WHAT is wrong with your voice and HOW you can change it.

### WHAT IS WRONG

There is nothing physically wrong with you, but you are not using your voice correctly.

When you speak, your voice is tense or tight. It does not sound smooth and clear. This makes your speech harder to understand.

## What is tension?

Tension is stiffness or tightness. When something is too stiff or tight, it does not work properly. For example, if the spring in a screen door is too tight, it is hard to open the door.

If muscles in your body are too tight or stiff, they also do not work properly. Have you ever tried to run with a leg cramp? Let's try an experiment. Take a pen and write your name. Now hold the pen as tight as you can and write your name. Was there a difference? Right, it was harder to write the second time. You were using two much effort to hold the pen. Your muscles were tense. It was easier to write when you were relaxed, not tense. The same is true of speaking. It is easier to produce voice when your muscles are relaxed, not tense.

## Can tension be changed?

Yes! You can change tension by learning to control it. Let's try tensing and relaxing some different muscles. Make a muscle by bending your arm. Now relax it. Tense your muscle again while you place your hand over it. Now relax. Do you feel how the muscle changes? When you tense your muscle, it moves and becomes harder. You are using your <u>tactile</u> sense to feel a difference. Your tactile sense lets you know how something feels when you touch it.

Now try tensing and relaxing this same muscle without moving your arm. Tense this muscle again, but do not touch it. Concentrate on the feeling in your arm. You can feel when the muscle is tight without touching it. Your kinesthetic sense tells you. Your kinesthetic sense tells you what your muscles are doing. Your muscles send messages to your brain. You control the tensing and relaxing of many muscles in your body.

Now place your hand on your voice box. Tense the muscles in your neck. Can you feel the muscles of your voice box get harder? Does your voice box move? If it moves, it probably moves upward. Now tighten your muscles like when you want to cough. Can you feel the tension using your tactile sense? Can you feel the tension using your kinesthetic sense?

Feeling the difference between tension and relaxation is important. Your muscles should feel relaxed, not tense, when you produce voice.

## HOW YOU CAN CHANGE YOUR VOICE

You can change your voice by learning to reduce tension (make it less). A speech therapist will help you learn to use a relaxed voice when you speak. You can do this by learning to hear and feel the difference between a tense voice and a relaxed voice. This takes practice. You will use amplification in the class. It will help you hear if your voice is tense or relaxed. You may also use some special machines that show pictures of your voice. They will help you see if your voice is tense or relaxed. When you know the difference between tension and relaxation you can practice using a relaxed voice. You will practice doing this in class. You should also practice when you are not in class. If you practice enough, using a relaxed voice will become a habit.