

A RESPONSE EVOCATION PROGRAM FOR /ʒ/

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A response evocation program, some principles underlying its development and administration, and a review of some clinical experiences with the program are presented. Sixty-five children with developmental articulation errors of the /ʒ/ phoneme were administered the program by one of 19 clinicians. Approximately 70% of program administrations resulted in a child emitting a good /ʒ/ within six minutes. Approximately 10% of children who were given additional training on program step failures emitted good /ʒ/'s in subsequent sessions. These preliminary observations are discussed in relation to the role of task analysis and motor skills learning principles in response evocation, clinician influences in program outcomes, and professional issues in service delivery to children with developmental articulation errors.

The 1970s may be watershed years for articulation management. There is a distinct trend toward reducing or eliminating school speech services for the child who misarticulates only one or two phonemes. The assumption underlying this change is that such errors are not handicapping (V. J. Smith, 1973). For this same population, however, there continues to be considerable activity toward development of programmed articulation therapy—effective and efficient management packages for administration by speech clinicians or speech aides. Faced with these trends, administrators and clinicians may understandably feel confused about articulation management. Should school districts provide speech therapy for the child with only an /s/ or /r/ error? Should clinicians rather than speech aides do all or some phase of therapy? Are the newer programs really more effective and efficient than the type of on-line procedures that many clinicians claim work best for them?

The discussion of response evocation procedures and preliminary observations of the program described in this report should be viewed against the background of the above issues. For decisions on at least the technical aspects of such questions, collection of adequate data will require management programs that are simple, explicit, efficient, and demonstrably effective. This paper focuses on the application of task analysis and principles of motor skills learning to response evocation programming for children who have developmental errors on /r/ and /ʒ/.

APPROACHES TO MANAGEMENT OF /r/ AND /ɜ:/ ERRORS

For children who are chosen for /r/ therapy, clinicians generally begin by assessing whether /r/ or /ɜ:/ is articulated correctly in any linguistic or stimulus contexts. Three alternate entry points for management depend on the results of such stimulability testing. First, following McDonald's (1964) seminal applied work in phonetic context, clinicians generally test to see if a child can make a good [r] or [ɜ:] in some key word or specific phonetic context (McDonald, 1968; Fisher and Logemann [consonant blend subtest], 1971). If the child can articulate any /r/ or /ɜ:/ allophones correctly, either in imitation of the examiner or preferably without a model, clinicians may choose to begin programming at the word level. Shine (1969) and Shriberg (1972) have discussed problematic aspects of the reliability of perceptual judgments across /r/ allophones; so-called facilitating contexts may be more a reflection of varying perceptual tolerance across allophones (Noll, 1970) than of actual changes toward acceptable phonetic production. The reliability problems facing the clinician notwithstanding, a variety of procedures and programs that rely on a child's ability to articulate a sound correctly in at least one phonetic context or word have recently been suggested (Fleming, 1971; Gerber, 1973; Goda, 1970; Griffith and Miner, 1973; Irwin and Weston, 1971; Pendergast, 1971; Psaltis and Spallato, 1973).

A second possible entry point requires that a child produce a good /ɜ:/ in isolation, given a model by the clinician. For the child who can produce a good /ɜ:/ in this way, the programming task becomes one of extending stimulus control by both fading the modeling cues and extending the linguistic contexts in which acceptable /ɜ:/'s occur. Importantly, for virtually all articulation programs now in use by speech aides or paraprofessionals, a child must be able to perform at either this level or the first level described above.

For many children, a good /ɜ:/ cannot be readily evoked in some phonetic context or in isolation by imitation. For these children, some evocation training becomes the third entry point for articulation management. Presumably only the speech clinician, in contrast to speech aides (or specialists in other disciplines currently vying for the right to serve children with articulation errors), has the training in articulatory phonetics needed to evoke /ɜ:/ phones. Mowrer,¹ in a survey of 151 clinicians, distinguishes two classes of techniques that speech clinicians use for evoking sounds: (1) tongue position instructions and (2) beginning from another sound. Both procedures attempt to get the tongue in a suitable position for the target sound. The first group of phonetic placement procedures does this by extensive instructions to the child regarding positioning and tensing of the tongue. The second type of procedure attempts to get the child to move his tongue to the target position via a phoneme that is already in the child's repertoire and has articulatory features in common with the target sound. On examination, these two basic techniques subsume an

¹D. E. Mowrer, personal communication on variations of evoking /ɜ:/. (1971).

amazingly diverse array of tricks to evoke a good /ʒ/ sound, involving many types of phonetic instructions, imagery, analogies, games, and laying on of hands (for example, pressing on the child's cheeks); for a sample of alternate suggestions to evoke /ʒ/ see Gerber, 1973; Nemoy and Davis, 1937; Pendergast, 1971; and Slipakoff, 1967. These and numerous other writings on response evocation generally support the on-line, what-works-best-type of experimentation noted previously. That is, the technology of response evocation appears to have lagged behind the development of systematic stimulus shift or transfer programs. Perhaps at no other stage of articulation management is the art of therapy more apparent.

RATIONALE FOR THE /ʒ/ EVOKE PROGRAM

An ideal speech sound evocation procedure might call for a tongue-positioning appliance that, when placed in a child's mouth, guarantees the proper tongue positioning for a good /ʒ/ (Altshuler, 1961; Mowrer, 1969). Evidently *orthophonistes* in France rely heavily on such direct physical positioning of the tongue by wands that are tipped with plastic bulbs of various sizes and shapes (Borden, 1974). The possible effectiveness of such prosthetic devices notwithstanding, there is need for a set of instructional procedures that, if followed, evoke a good /ʒ/ each time. The instructional content and sequence should make minimal demands on cognition and intelligence and be suited for children or adults. We have found the following information to be of value to students and practicing clinicians attempting to develop response evocation strategies for the /ʒ/ sound.

Phonological Development

The scattered bits of ontogenetic information on /r/ and /ʒ/ do not yield much in the way of suggestions for sequencing response evocation. Descriptively, we know that children use a large variety of [r] phones (Anthony, et al., 1971; Kresheck, 1969; Stancyk, 1968) on their way to mastering /r/ which several accounts agree occurs in most children by four years (Sander, 1972). Crocker's (1969) proposed sequence of featural development leading to /r/ has received at least indirect support (Leonard, 1973). However, although /r/ appears to be the last liquid acquired, Ferguson and Farwell (1973) have recently questioned Jakobsonian theory's emphasis on generalizations about the order of phonological development. Their critique and data suggest that there are pronounced individual differences in the strategies adopted by children in acquiring adult phonology. Stancyk (1968) suggests that /r/ is generally mastered before /ʒ/; however, our clinical experience indicates that children who have problems with either phoneme typically have some problem with both.² Evidence for a common phonetic-level locus for errors on both

²In a study in progress of children with /r/ and /ʒ/ errors, we found only one child out of forty-nine first- and second-grade children who had errors on only one of these two phonemes.

phonemes is suggested in recent spectrographic analyses of the ostensible w/r phoneme substitution (Dalston, 1972; Klein, 1971; Swisher, 1974). On acoustic analyses, these authors find that many children who are perceived as having a w/r substitution are better described as producing /r/ target sounds whose formants fall midway between /w/ and /r/. Hence at least some /r/ errors and most /ɜ:/ errors might be viewed as phonetic errors, rather than phonemic-level substitutions (however, for an intermediate view see Oller and Kelly's [1974] treatment of phonological substitution processes). It would follow that immediate training on production as opposed to phonemic discrimination pre-training would be warranted. Whether or not discrimination invariably precedes production in normal phone-class development (Edwards, 1974; Menyuk and Anderson, 1969; Shvachkin, 1973; N. V. Smith, 1973) and regardless of clinicians' favorite timing of error discrimination-type activities in the course of therapy (Prins, 1963), teaching production of /ɜ:/ first is expedient. Most writers on this subject recommend beginning with /ɜ:/, later developing /r/ and inter- and intraperson discrimination skills (for example, Gerber, 1973; Panagos, 1970; Pendergast, 1971).

Programming and Task Analyses

In their instructive essay contrasting applied behavioral analysis to treatment procedures ("tricks") that do not derive from basic learning principles, Baer, Wolf, and Risley (1968) note, "Collections of tricks historically have been difficult to expand systematically, and when they were [are] extensive, difficult to learn and teach." (p. 96) In the present context of speech sound evocation, these comments seem particularly trenchant. Evoking acceptable speech sounds may contain elements of response differentiation, response building, putting-through procedures, shaping, and other paradigms for acquisition of behavior. According to principles described by Bateman (1971), Becker, Engelmann, and Thomas (1971), Engelmann (1969), and Robb (1972), a programmed procedure for teaching any skill should contain two properties: (1) the steps should sequentially teach each of the critical subroutines required for execution of the terminal behavior; and (2) the nature of failure at any of the program steps should be diagnostic, in the sense of suggesting further tasks to enable mastery of the critical subroutines. A logical basis for the content and sequence of program steps in phoneme training might be a recapitulation of the normal developmental phonetic sequence leading to /ɜ:. As the previous brief review suggests, such data are currently not available. However, sufficient information for successful /ɜ:/ evocation may be drawn from task analyses in two areas—articulatory requisites and clinician cues.



Articulatory Requisites. Given the historic controversy over phonetic assumptions for vowel /ɜ:/ symbolization (Abel, 1972) and the variety of allophones of /r/ in American English, phoneticians generally describe /r/ and /ɜ:/ as retroflex sounds (they are not, of course, necessarily retroflex). According to Heffner (1964), "The essential feature of retroflex [ɜ:] is that

the tongue, while it assumes the normal position for [ʒ] also curls its apex back so that the underside thereof lies parallel to the line of the upper teeth, and the alveolar and prepalatal region" (p. 108). We suggest that to execute this behavior, a child will need to:

1. be able to move the body of the tongue grossly on command,
2. know (by pointing with his finger) where his tongue tip is,
3. know (by pointing) where his alveolar ridge ("bumpy place behind top teeth") is,
4. be able to lift his tongue tip to his alveolar ridge,
5. be able to sustain elevation of the tongue tip for several seconds (a nominal training time is five seconds) without the tongue tip roving around,
6. be able to move tongue body and tip forward and backward without jaw motion, and
7. be able to move and tense his tongue independent of phonation or jaw movement.

Note that this task analysis does not specify instructional cues for lip rounding, height of back of tongue, or tongue widening. We have observed clinicians cue these later gestures in on-line shaping sessions for /ʒ/. We suggest that the behaviors listed comprise the critical subroutines for the execution of /ʒ/; cues for additional gestures may be necessary only for individualized branch programming.

Clinician Cues. Three tactics related to clinician cues warrant consideration. First, we suggest that clinicians should not refer to phonemic /ʒ/ in the course of instruction, for example, avoid "Today we are going to work on your /ʒ/ sound: errrr . . . errr . . . errr." To set the learning task as an attempt to correct a phoneme seems to invite phonological interference (Leonard, 1972). Rather, the assumption is that the child should approach his task as one in which he is simply going to make a series of movements and sounds (we are mindful of the important distinction between movement commands for speech versus nonspeech tasks [Hixon and Hardy, 1964]). In the /ʒ/ Evoke Program to be described, we deliberately bypass both his incorrectly stored phoneme and his possible history of failure with others' attempts to teach him how to make a "good /ʒ/." We convey no assumption that he has a problem to solve (Van Riper, 1972). Wingo and Hoshiko (1972) have found imitative stimulation and directions, as opposed to tactile stimulation and directions alone, to be the most fruitful teaching method for sound evocation. However, their stimuli were unfamiliar sounds, ones for which a child had no incorrectly stored phonological representation and no adverse reinforcement history.

Second, we note that one of the problems that besets both the child's production and the clinician's perceptual judgments are speech behaviors that go in and out of correctness. Because children will very faithfully imitate the most subtle aspect of modeled stimuli, clinicians should present only steady-state, continuant sounds. That is, in terms of pitch, loudness, and vocal quality, any models of speech behavior that clinicians do emit should have a rapid onset, a rapid rise and fall time, and monopitch; that is, , not . We have found it helpful to teach clinicians to position their vocal tract first, then initiate phonation with a relatively hard vocal attack, terminating

phonation before relaxing vocal tract posture (the effect sounds not unlike a computer-generated speech sound). Exaggerated behaviors of any type, for example, loudness, lip rounding, and head nods, are all behaviors a child will readily imitate along with the target behaviors and should consequently be avoided. Inspection of our videotapes has disclosed convincing, if sometimes amusing, evidence for this spread of imitation effect.

Finally, despite a current trend to minimize such factors, teaching a child to emit a good sound requires sensitive interpersonal communication. The paralinguistic messages carried by a clinician's voice quality, rate, intonation, and facial-gestural behaviors comprise part of the stimulus complex operative in any programmed teaching sequence (Shriberg, 1971). Although we currently find it difficult to quantify clinician behavior on such dimensions we recognize that these individual differences are evident whenever two people attempt to faithfully follow the same set of written instructions. This elusive source of variance (Boone, 1970) remains an undeniable component of any instructional sequence, despite the best efforts of programmers to obtain clinician control. However, ostensibly motivational clinician statements such as "Gee, . . . you're doing it much better today than you were Tuesday" are not only inefficient—they may absolutely get in the way of a child's learning the motor skills task at hand (Robb, 1972). We have observed that once a clinician feels assured that motivational support can be effectively conveyed by paralinguistic cues, such off-task "clutterers" (Bateman, 1971) as well as excessive instructional repetitions become markedly less frequent. In the same sense, if frustration in response to failure leads the clinician to accept and reinforce behaviors that do not meet response definitions, for example, "Well, . . . I guess that one was sort of . . . OK," reliable acquisition of behavior is confounded. Again, clinicians should be pleasantly firm in consequating behaviors during a motor skills learning task; motivational needs following incorrect responses should be responded to on a paralinguistic level.

CLINICAL EXPERIENCES WITH THE /ɜ/ EVOKE PROGRAM

The /ɜ/ Evoke Program presented in the Appendix has been developed in consideration of issues developed in the previous review. Its structure and content are based on information in motor skills programming, articulatory phonetics, and our clinical experience with children. For the reader's convenience, the entire program is shown. The goal of the program is only to evoke a good /ɜ/, which can subsequently be stabilized by a number of procedures and used for transfer programs. The reader should inspect the content and sequence of the eight-step program before continuing with the next section of the text.

What follows is a review of some clinical experiences with the program. These observations are clearly limited, with respect to documenting the effectiveness and efficiency of the program; rather the focus is on possible clinical processes underlying program outcomes and suggested research directions.

Method

The /ʒ/ Evoke Program, essentially as presented in the Appendix, has been administered to over 65 children by 19 clinicians. Children ranged in age from four to 12 years, including new articulation cases and some children who had been in therapy and had never been heard to produce a good /ʒ/. As classified by their clinicians, all children had developmental articulation errors, although some children were also being seen for language or educational deficits. None were reported to have a hearing loss. Field test data were submitted by clinical supervisors, students working in a parochial school practicum, and public school clinicians from several districts who heard the program discussed at a regional meeting. The data base consists of scored data sheets, tape recordings, and interview reports with most of the 19 clinicians. Tape recordings of the entire program administration were available for 28 subjects. For these children, both the author and clinician were required to agree that at least one good /ʒ/ was evoked in Step 8a to classify the administration as a success. In almost all these later cases, several clearly good /ʒ/'s were evoked, as judged independently by the clinician and the author.

Results and Discussion

Successes. Approximately seven of every 10 children given the program went right through it, meeting termination criteria at each step and achieving good /ʒ/'s at Step 8a or after some brief branch training at Step 8b.³ The average run time was six minutes. Among this group were at least six well-documented instances of children who had failed to produce good /ʒ/'s in previous therapy. These were the dramatic cases; these veteran clients were no less pleased than their clinicians to finally hear themselves making good /ʒ/'s. Another approximately 10% of children who were given additional training on program step failures emitted good /ʒ/'s in subsequent sessions.

These preliminary successes are encouraging, although a controlled study, both in terms of internal validity and reliability, and assessment of the relative efficiency of the program in comparison to other procedures is needed. For example, we do not know whether the new therapy cases in this sample might have done just as well on some other procedure or on Step 8a without the benefit of previous steps (by itself, Step 8a resembles a standard evocation procedure). On the other hand, the average run time of only six minutes and the successes with the six cases who had never been able to say good /ʒ/'s is attractive. Importantly, review of the tape recordings indicated that clinicians who followed the written antecedent and consequent events at each step and who reinforced only behaviors that met response definitions generally obtained a higher percentage of successes. Training clinicians to accurately discriminate each of the behaviors required by response definitions in response evocation

³As noted in the Appendix, Step 8a yields [1 . . . ʒ]; clinicians reported a variety of simple procedures to fade [1], after the percept of the target /ʒ/ was established.

programs may require extensive audio and video examples; the printed instructions as in the Appendix were evidently insufficient to obtain clinician control across this sample. Training examiners to criteria on a research protocol is an obvious methodological necessity in controlled research. However, it is a less obvious consideration in the dissemination of programmed materials for use by working professionals, and it may be particularly critical for the perceptual skills needed for successful administration of programmed response evocation materials.

Failures. The approximately 20% of children in this sample who failed to emit good /ɜ:/s can also be divided into two groups: those children who never reached termination criteria on one or more steps between 1 and 7 and those who completed Steps 1-7, but failed to emit a good /ɜ:/ after many trials at Step 8. Several aspects of these program failures warrant comment.

Motivational deficits were definitely not more apparent in these children. Although token reinforcement did seem to be indicated for several children who were in remedial programs using token reinforcement, social reinforcement (1:1) together with visible data keeping maintained responding on this program. Aside from some hesitancy and a giggle here and there, following the instruction "Stick your tongue out," children were reported to be attentive and really trying. Contrary to other response evocation procedures, these children received a high density of "good"s (and checks) for their "good work" even though they never emitted a good /ɜ:/. On balance, we suspect that children respond extremely well to response evocation procedures as developed here. We would speculate that because of the nature of the task at each stage of management, motivational issues may be more elusive at carry-over stages of therapy. During response evocation, on-line motivational components can be monitored fairly closely by the sensitive clinician and play breaks from production training can be taken as often as needed. Achievement of setting generalization or carry-over may require a broader understanding of the child. In any event, we view the reported failures as program or instructional failures, not child-effort failures.

The error data generally support the task hierarchy of the program. Errors were made by some children on virtually every step of the program. As expected, Steps 5, 6, and 7 had the highest error rates. The most frequent comment was that a child had "no /l/" or a "wavery /l/." Since /l/ normally corrects itself before /r/ in children with liquid errors (Templin, 1973), training for /l/ acquisition before /r/ or /ɜ:/ seems appropriate. Other children simply did not sustain steady phonation, that is, monopitch-monoloudness, while keeping the jaw still and moving the tongue. Frequent clinician comments were "he doesn't seem to know where his tongue is," "he can't keep his tongue still," "he drops his jaw when he moves his tongue," and other descriptions familiar to practicing clinicians. Possible deficits in sensory and motor capacities have been investigated as etiological substrata for articulation errors. Here, we are concerned only with systematic performance training for

control of relevant behaviors. For many reasons, tongue movement drills, oral exercises, and so forth have been held in disaffection by contemporary clinicians working with "functional" articulation disorders. However, our successes suggest that at least some children may profit from pretraining on movement and interdependent control of the articulators (including the larynx as an articulator [Broad, 1973]). However, whereas drills have often been proposed as part of a routine therapy regimen, our experiences suggest that subphonemic programming should follow only from consideration of individual performance data.

Finally, the obtained program failures at Step 8 only, the second type of program failure, attest to the difficulty in gaining instructional control over some types of articulatory behavior. Within this group, some children did not actually comply with the instructions. For example, some clinicians reported that "his tongue moved too fast," "his tongue dropped too soon," or "his tongue seemed to be pressed too firmly against the roof of his mouth." Step 8b is a branch step for these possibilities. In Step 8b, children practice the sub-routine of sweeping the tongue across the hard palate. Since the movement is done silently, the child's report on his behavior is the only response available to the clinician. Clinicians who want to see the child's tongue movements may make the task more difficult or impossible for the child, since visual access to tongue movements requires that the child lower his jaw, which of course, will affect relative tongue height. Other children who failed only at Step 8 appeared to follow all instructions faithfully, but simply did not produce good /ʒ/'s. For the small percentage of children in this last group for whom everything seems to be fine but a good /ʒ/ does not result, we have no further explanations or suggestions for response evocation at present. We assume that individual differences in oral morphology are involved in some of these children, calling for additional cues to allow the tongue to partition the oral cavity suitably for a perceptually acceptable /ʒ/.

In conclusion, the program described here illustrates a programmed approach for evoking the /ʒ/ phoneme. Some, but not all, clinicians were able to make effective use of the diagnostic information it generated for branch programming. Reportedly, the program gave these clinicians information on which subphonemic features to work on, rather than allowing failure to evoke /ʒ/ immediately to prompt them to reach for some other phoneme-level evocation trick. In a broader context, this report has attempted to encourage a technology of response evocation. By public school age, perhaps only children with /s/ and /r/ errors require attention by speech clinicians. However, for the younger child with multiple articulation errors, the press to achieve intelligible speech may indicate the need for early training on other sounds. For both younger and school-age children, the extent of carry-over may be dependent on the nature of the learning that occurs early in the therapy process. To date, at least some children appear to require and profit from the skills of speech clinicians rather than paraprofessionals, for response develop-

ment. Well-developed response evocation programs, as well as stabilization and transfer procedures, will be needed before professional issues in articulation management and service delivery can be fully considered.

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APPENDIX

/ʒ/ Evoke Program

General Instructions

- I. Client prerequisites
 - A. Ability to attend and follow simple directions
 - B. Ability to articulate /l/ correctly in free speech
 - C. Absence of a dental spurlike appliance (that is, for tongue thrust or thumb-sucking)
- II. Clinician behaviors
 - A. The program should be administered exactly as written. In particular:
 1. Correct-incorrect responses should be recorded (✓ 0) after each response; back-up reinforcers for checks or step completion are optional
 2. The instructional pace should be comfortably brisk, not overly slow; an errorless run through the program should take no longer than five minutes
 3. Extraneous motivational or instructional comments should be avoided; take well-defined breaks from training if required
 4. The /ʒ/ sound is never modeled or mentioned; model other stimuli naturally, but use monopitch and monoloudness for vowels and syllables
 5. Reinforce only those behaviors that meet the response definitions, particularly only good /ʒ/'s
 - B. If child has 7-10 consecutive incorrect responses at any step, branch from the program, train the response to criterion, and return to the program
 - C. Successful completion of Step 8 will yield [l . . . ʒ]; the clinician will need to program for fading [l]-related cues

Pretest

If the client cannot sustain /l/ for five seconds he will have difficulty at Steps 7 and 8.

<i>Instructions</i>	<i>Child's Response</i>	<i>Clinician's Response</i>
1. "Say /l/."	"/l/."	"Good."
2. "Now let's see if you can say a nice long /l/ for as long as I hold my finger up. Ready, go." Clinician holds up finger for five full seconds.	Child sustains a steady /l/, no pitch or loudness changes, for five full seconds.	"Good. Now let's do something else." Proceed with Program Step 1 or train /l/.

Goal (Phase)	Step	Instruction (Antecedent Event)	Response Definition	Reinforcement (Subsequent Event)	Termination Criteria	Data ($\frac{w}{o}$) Trials
						1 2 3 4 5
II. Tongue control and sustained phonation	5.	"Now, put your tongue tip there again, and say /l/. (2 second model)"	Produces /l/ for 2 seconds. Make sure he does not say [Al]	"Good"—"Again" or "Not quite," and re-instruct "Make sure your tongue is there before you turn on your voice box."	3 consecutive times	
	6.	"Say /l/ each time I hold up my finger." (Clinician holds up finger.)	Produces /l/ (not [Al]) for 2 seconds.	"Good" and hold up finger for next response or re-instruct.	3 consecutive times	
	7.	"Now say /l/ for as long as I hold my finger up, like this: (hold up finger and model for 5 seconds) Ready, —go." (hold up finger for 5 seconds.)	Produces a .5 second /l/ with no phonation breaks and minimum tongue movements.	Same as above	5 consecutive times	
III. Evoke /ʒ/	8a.	"Say a long /l/ but this time as you're saying it, drag the tip of your tongue slowly back along the roof of your mouth—so far back that you have to drop it." Accompany instructions with hand gesture of moving fingertips back slowly, palm up.	Tongue tip is dragged back slowly sustaining phonation until tip has to drop and a good /ʒ/ is heard. Jaw should not drop during this movement.	"Good, that's the sound I want—exactly like that again." or "Not quite" and re-instruct. If criterion is not met because child is not moving tongue back correctly, go to Step 8b.	5 consecutive times	
	8b. B R A N C H	"Let's practice pulling the tip of your tongue back across the roof of your mouth. Pretend you are licking whipped cream off the roof of your mouth. Do it without making any sound."	Child's report is only available response.	"Did you drag the tip of your tongue slowly back along the top of your mouth? — pressed lightly? — touching until you have to drop it?" "Like this." Use hand cues demonstrating each of the above.	Return to Step 8a when child indicates he has it.	