SPEECH CORRECTION IN SECONDARY EDUCATION

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SPEECH CORRECTION IN SECONDARY EDUCATION

THESIS

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By

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CHAPTER I

PROBLEM

To determine the speech defects found in the high schools of Denton County and the corrective measures best adapted to the treatment of such handicaps.

INTRODUCTION

The purpose of this study is to determine the best method in making the high school child a present of himself. Lack of confidence in himself is as often a cause of incorrect speech as is the actual malformation of some speech organ. Self-consciousness presents as great a problem as do some of the major speech defects, such as stammering, aphonia, or disphonia.

Teachers have it within their power to mold and make children into charming, tactful, lovable women, or competent, efficient, self-relying men. There is one outstanding rule in child-training which must be observed in order to produce normal citizens. Children should never be frightened into learning. If there is a latent tendency in a child to have a major disorder in his speech, a teacher, by using the wrong method of procedure, may frighten the child and cause that hidden disorder to become visible in his daily speech.
This study of major and minor speech disorders has not been prepared simply for those people interested in the teaching of speech, but for all teachers, whether in the home or in the school room, who intend to make the instruction of children their life occupation. A more detailed study of the correction of faulty speech within the high school has been made in this paper, because of the difficulty in correcting the adolescent child's speech habit of long standing. The correction of disorders in speech of the younger children in the elementary grades is an easier problem, as their speech is still in the formative stage and is more easily moulded.

PLAN OF STUDY

This study includes three phases within its plan:

1. A survey of Denton County, as to the speech defects in the high schools of the independent school districts, was made by the questionnaire method and through personal interviews with the superintendents of those schools as to speech facilities.

2. A practical study of the speech problem based on clinical work, case history, and remedial work given in the form of lesson plans.

3. A study and analysis of all books written by the authorities on speech handicaps within N.T.S.T.C. library.
METHODS USED IN GATHERING DATA

1. The following letter was sent to all superintendents of independent school districts in Denton County.

---

Dear Sir:

I am making a survey of the speech conditions of the children in the affiliated high schools of Denton County and would appreciate your help and co-operation. If you will give one of the enclosed blanks to each of your home-room (or check-up period) teachers with the request that the blanks be filled in and returned to you as quickly as they can be done, with accuracy, I shall appreciate it.

As I am surveying each of the nine Denton County high schools concerning speech difficulties, I shall leave you a copy of my entire findings, or if you prefer, just the tabulations from your own school.

I should like to come to your school and get the filled-out blanks from you. Since I shall try to cover as much of the county in one day as possible, may I see you at _______ _______ _______? If any of your teachers have any difficulty in filling out the enclosed blanks, I shall be glad to help them with the data at that time. I inclose a self-addressed card for your convenience in letting me know if I may have a personal interview when I collect the material.

---

2. The following questionnaires were inclosed with the letter.
To the highschool homeroom teacher: Will you please list the names of the students in your homeroom group who are suffering from some speech handicap, and check in the appropriate columns all errors found for each child. Example: Mary Jones lisp, uses baby-talk, and suffers from aphonia. Her name is entered and checked according to pupil No. 0.
Out of the first mailing of the questionnaires, six superintendents returned the postal cards granting the interview.

Six weeks from the first mailing of the questionnaires follow-up letters were written with more questionnaires to the remaining three superintendents. Hearing nothing from those letters, another follow-up letter was sent and one answer was received.

At the end of two weeks, a visit was made to the two remaining superintendents, and permission was granted to interview the high school home room teachers to determine the speech defects in the school.

3. Additional data were secured from the Speech Clinic of North Texas State Teachers College, under the direction of Mrs. C. M. Johnson, Director of the Speech Department, and Mrs. Myrtle Hardy, and from a smaller clinic carried on for four and one-half months in the Demonstration School of the College, by Mrs. Christine Higginbotham and Miss Frances Prime.

From these sources, actual case histories and remedial drills for speech corrections were secured.
### TABLE NO. I SHOWING SPEECH DEFECTS AND DIFFICULTIES
IN THE SECONDARY SCHOOLS OF DENTON COUNTY
DISTRIBUTED ACCORDING TO SCHOOL AND GRADE

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<td>Cleft Palate</td>
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<td>3 4 4 6</td>
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RESPONSE TO THE QUESTIONNAIRE

When the data from the questionnaires were gathered, the superintendents and homeroom teachers were questioned as to the speech program and remedial work offered by their systems. Only three administrators out of nine were initiating a speech program. No interest in remedial work was manifested by the homeroom teachers as they lacked knowledge, time, patience and interest to give drills for speech correction. No system in the county had a clinic to take care of the unfortunate children suffering from speech defects.

RESUME OF FOLLOWING CHAPTERS

Chapter II deals with the purpose of speech and speech correction in the high school curriculum with a discussion of the mechanism of speech.

Chapter III describes the methods of organizing a speech clinic and general exercises which should be observed before any remedial work is begun. This chapter also gives actual case histories of persons having various speech defects, methods suggested by the authorities for correction, and actual lessons plans which proved successful in remedial work.

Chapter IV contains the conclusions reached from this study, and recommendations for bettering speech conditions in the high school.
CHAPTER II

SPEECH MECHANISM

Education is the development of mind, body, and spirit. Personality is the harmonious development of mind, body, and spirit, into a charming unit. As teachers are responsible for the education of youth, they are, therefore, personality builders. Nothing is more harmful to personality than a speech handicap, or speech error which points one out from the individuals with whom he associates. Speech handicaps should be so great a challenge to teachers' guidance ability that they will exert every energy to make the pupil who suffers from such a defect a normal and happy child.

The life of Demosthenes sets an outstanding example for those who are unfortunate enough to have speech defects. His big dream was to be a politician and orator with ability so great that he could sway thousands to his will. But could such a dream be realized when the dreamer stammered so pitifully that even his immediate friends could hardly understand him? With perseverance, drill, and determination, he turned a great handicap into an asset which placed him among the first, even today, in his chosen field of oratory. What Demosthenes did, in centuries past, is no more than can be done in this modern era.

Speech has for its goal only one object: communication. Social control, of course, is the aim of communication,
while social activity is individual communication. Speech is merely letting others know what one wants. Speech has out-grown the old fashioned idea of elocution, and speech teachers recognize that speech training is for all students and not merely for those especially gifted in the art of speech. Also, teachers see that speech training is a means of securing better social adjustments for each child, and that training increases his chances of success in whatever field he chooses. Good speech is a necessary asset to the doctor, the dentist, the teacher, the broker; good speech is necessary for anyone who is called upon in any way to meet the public. Proper speech training gives the child poise, an agreeable voice, and the ease of expression.

If a child has some handicap that causes him discomfort in meeting the public, he should be helped by the teacher to find relief from that defect.

It has often been said that every American is called upon, at least once in his life, to make a speech. Training the pupil for that type of public speaking, however, is not the aim of the modern speech teacher. But every American employs speech each day in the year to get for himself the things he needs. The more effectively a person makes his desires known, the nearer he comes to realizing them. If speech is to be effective and pleasing, it must first be free from error. There are many speech
faults which, while not great, are irritating enough to keep the individual from making his desires known. Many of these imperfections can be removed so easily that it seems cruel for the children to be allowed to continue with them. It is a proved fact that a great factor of the pupils into high school mortality of grammar school is the child's realization that he is, in some way, different from his fellow classmates. Children who suffer from a major speech handicap usually never graduate from high school. Many imperfections in speech can be removed if the student is willing to make a conscientious effort to follow the suggestions made under the direction of a capable teacher.

There are many ways to classify speech errors, but, in this paper, they shall be referred to in three groups: organic defects (physical abnormality); functional (improper use of the organs of speech); emotional (instability of the nervous system).

The teacher who undertakes to eradicate any speech difficulty should adopt some standard of procedure and attempt to handle all speech defects in a like manner. In each case, the cause of the speech defect should be determined. If it is a physical mal-adjustment that a physician could handle, the child should be urged to see a doctor. The teacher must determine the sounds which the child is making wrong, and try to show him where his phonation is wrong and just how to make the right sound. She
should inspire the child to want correct speech and enlist his efforts to study any corrective material carefully and faithfully. A habit of exercise every day as often as possible should be practiced. The pupil should make the new sounds separately, in words, sentences, and paragraphs. He should not be allowed to lapse into the old habit for any reason, but should be kept encouraged. The goals that he can reach by good speech should be pointed out to him, so that he will become imbued with the courage and perseverance that long, corrective drills require. In addition, a good speech teacher can help form his personality into that of a charming, well-balanced individual.

Before going into the actual case of corrective drill, it is necessary for the child and the teacher to become thoroughly familiar with the mechanism of voice production.

It must be remembered that speech is a superimposed function, and that each of the speech organs was originally intended for some other purpose.

The basis of speech sound is the current of air flowing up from the lungs and modified in various ways during its passage through the vocal cords, the mouth, and the nose. The child should become thoroughly familiar with the following diagram, as this is the most simple explanation of the principal organs of speech.
FIG. I

LL. The lips.

TT. The teeth.

TR. The Teeth-ridge (or simply ridge).

Bl. The blade of the tongue. (The flexible fore-part of the tongue; the only part of the tongue which can project from the mouth.)

H. The hard palate (extending from the ridge to the soft palate).

F. The front of the tongue. (That part which, when in a state of rest, is opposite the hard palate.)

S. The soft palate (which may be raised or lowered, and which may also be made to close or open the passage to the
B. The back of the tongue. (That part which, when in a state of rest, is opposite the soft palate.)

U. The Uvula. (Not used in the production of any English sounds.)

P. The Pharynx. Not used in the production of speech-sounds.

E. The epiglottis.

Fp. The food passage

V. The vocal chords (similar to a pair of lips).

W. The windpipe (leading to the lungs or "bellows").

It is best now to learn that the mechanism of speech is divided into four major divisions: 1, the mechanism of respiration; 2, the mechanism of phonation; 3, the mechanism of resonance; 4, the mechanism of articulation.

1. The mechanism of respiration has for its duty the handling of the air in such a way that speech sounds are made when the air currents are turned loose. The chest, of course, is the big unit in respiration. The upper opening of the chest is the windpipe, the gullet, the upper projecting tips of the lungs and numerous muscles, glands, ducts, nerves, and blood vessels. The bottom of the

chest, or the large part, is formed by the diaphragm, a powerful sheet of muscles which is shaped like an inverted cone. The chest is made so that it can enlarge on all sides. The lungs occupy the cavity of the chest.

The nasal cavity is a bony passage through the head. It is through the nose that the air should be taken to the lungs.

The mouth cavity is just below the nasal cavity, and we know that the mouth contains the teeth, tongue, hard palate, and soft palate.

The pharynx is that cavity which one can see at the back of the mouth. It is a funnel-shaped passage which extends from the base of the skull downward to the opening of the larynx on one hand and the opening of the gullet on the other.

The larynx, or glottis, is the short passage formed of strong elastic tube continuous with the inner linings of the windpipe, and surrounded by a framework of cartilages movably articulated together. The epiglottis, or tiny lid-like apparatus, keeps food intended for the gullet from entering the windpipe.

The trachea, or windpipe, is the lower end of the larynx opening. It is often called the Adam's apple.

The bronchi are the lower extremity of the trachea which has been divided into two smaller branches which lead directly to the lungs. Upon entering the lungs, the bronchial
tubes become the bronchi.

Respiration means the inspiration or inhaling of air into the body, and expiration, or exhaling of the same air current from the body.

The purpose of the respiratory mechanism, so far as speech is concerned, is to produce the blasts of air from the lungs, on which the voiced sounds ride.

2. The mechanism of phonation has for its special duty the turning of these air currents, sent by respiration, into speech sounds. Speech sounds are generally referred to as tones or quality.

Quality is that thing that differentiates one's voice from others. The natural quality of the voice expresses the physical and mental attitudes of man. A person is judged, to a great extent, by his voice.

Variety is the spice of life and speech, and variety in speech is due to time, force, strength, pitch, and duration.

The organs of phonation are 1, the larynx, or voice box; 2, the true and false vocal chords, which are not chords at all but the free upper edges of two folds of elastic tissue which approach each other from opposite lateral walls of the laryngeal tube. The average length of the vocal chords in the male is seven-twelfths of an inch, while the vocal chords of the female are usually five-twelfths of an inch; 3, between the vocal chords there occurs a narrow fissure known as the glottis, the shape of which serves as
an accurate indication of whether or not the larynx is adjusted for the initiation of the tones. The so-called false vocal chords have nothing to do with the production of tones; they are merely the protection of the true chords. Between the false vocal chords and the true vocal chords are two shallow depressions known as the pockets of the larynx or the ventricles of morgagni. These give the true vocal chords room for adjustment during vibration and act as resonance chambers.

For speaking, the vocal chords must be slightly tensed and so approximated that the utmost width of the fissure between them will not exceed one-twelfth of an inch.

Before speech tones can enter into the acoustic structure of the spoken language they must be built up in volume and shaded in quality by the mechanism of resonation.

The determination of the strength of a spoken tone is the vibratory amplitude of vocal chords—the width of the swing each vocal chord is made to take during vibration to either side of its neutral position of rest.

Pitch is generally thought of as the key on which one talks. It depends entirely upon the vibratory frequency of the vocal chords.

3. The mechanism of resonation are those chambers which are used as amplifiers of tone.

The cavities of the throat, mouth, nose, laryngeal ventricles, sacculus laryngis, maxillary, sphenoidal,
and sinuses, all resonate the speech tones initiated by the mechanism of phonation.

One of the most important functions of the mechanism of resonance is the determination of the acoustic characteristics, or the qualities of speech tones. Were it not for the mechanism of resonance, all speech tones would sound very much alike—flat, colorless, indistinct, and uninteresting.

The voiced thoughts determine the pitch of the tone. Each pitch has its corresponding chamber of resonance and this chamber repeats the pitch. In this manner the echo is produced. The echoed pitch determines the quality of the voice. The individual may not consciously change the quality or pitch of his voice, but the vocal organs, resonance chambers, and laws of acoustics take the tone and arrange it into a melody (or quality) of its own. The beginning of the sound may be true but, due to some organic defect, the sound may draw a response from the wrong resonating chamber and in that way produce a harsh, ugly tone.

4. The mechanism of articulation is composed of those organs which have to do with the final spoken sound. The air currents are broken up into small spoken pieces and then the different obstacles in the way of that spoken word tend to whip the sound into the shape of a pattern that has been set by good usage. The organs are the teeth, tongue, gums, hard palate, and soft palate.
CHAPTER III

PROBLEMS AND METHODS IN THE SPEECH CLINIC

The success of a speech clinic depends upon the director or supervisor who is diagnosing and offering remedial work to those unfortunate children who suffer from speech handicaps. She must be vitally interested and enthusiastic enough over the methods of correction that her enthusiasm will transfer to the child and he will respond quickly and readily to any treatment she may offer.

The supervisor or director, must be as near the mark of perfection as possible. Children are great imitators. If the director, wishing to establish good principles, can be an example of the goal she is trying to get others to reach, half the battle is won. The director must know the details of the work of the clinic, how to detect errors, classify them, and the remedial procedure they demand. Tact is a major requirement of the director. She must realize the psychological effect of her presence, the child's sensitiveness to his own defect, and the individual differences of all children suffering from any sort of speech defect.

As the clinic is vitally interested in each child, there should be some system of keeping individual records or case histories on file. As all children will not respond to the same treatment, methods of individual treatment should be recorded with the case histories.
If possible, every speech clinic should have a cheerful, well-kept room, accessible to running water, and modern lighting fixtures. The tools necessary to the clinic/head mirrors, tuning fork, records for musical ability, handedness tests, tests for I Q's, tongue depressors, and phonetic charts.

The individual speech record, or case history, should include the child's name, nationality, mental and moral status determined by tests, activity in school work, and general personality. It should tell in detail the general conditions (whether strong, anemic, active or weak), and should list all defects of the eyes, ears, nose, throat, mouth, lips, teeth, or tongue. In the record should be a description of any illness, past or chronic. The child's home environment should be considered as to standard of living, care of the child at home, other children in the family, speech and other defects in the family. A complete diagnosis of the child's defect should then be made with his errors written out phonetically.

Speech problems include all deviations from accepted speech, in degrees varying from a mild form of regional dialect to a bad case of stammering. All authorities have differing views about what constitutes a speech defect. It may be said, however, that any manner of speech pointing one out from his associates is faulty or defective speech.

In this study speech defects have been divided
into three distinct classes:

A. Functional defects are those defects which are not due to any physical handicap, but are phonetically wrong. Such defects are lisping, baby-talk, nasality, denasalization, careless speech, muffled, indistinct tones, and foreign dialect.

B. Organic defects are those defects due to a physical handicap. They are cleft-palate, hare-lip, malocclusion of the teeth, tongue-tiedness/sometimes lisping.

C. Emotional disorders include stammering, or stuttering, and aphonia.

Of course these defects cannot always be classified and remain in one of these particular groups. Each defect is an individual problem and might be found to be a part of all three classes.

Almost all defects can be cured. Of course the seriousness of the organic defects must be taken into consideration. If an operation is necessary, the fright might produce another handicap within the child and his emotional disorder become so pronounced that he will never be able to overcome it. It is the task of the director to alleviate all fright. Co-operation is the first essential to a successful speech clinic. The desire for good speech must first be planted within the thoughts of the child. If he desires good speech so earnestly that he is willing to spend hours on drills and ear-training exercises, to work
continuously for days, weeks, and months, and once he produces the right sound to never relapse into the old habit, his chances to overcome any defect whatsoever are the highest. Careful guidance is necessary because of the ease with which one can substitute one bad habit for another.

Introductory exercises, drills, and tests should be given every child entering the clinic.
INTRODUCTORY EXERCISES

Before the actual work is done in segregating the various speech defects and applying the remedial drills, there are a number of exercises and suggestions that should be observed.

"SPEECH HYGIENE PROGRAM, FOR DAILY PRACTICE"

1. Regular hours of sleep, nine hours or more per night. Retire at 8:30, if you are less than 16 years old—an hour later if you are older.

2. Try to go to sleep directly, with pleasant cheerful thoughts. The easiest way to accomplish this is to relax completely as possible, and to seek to be 'drowsy.'

3. Try not to become very much excited when you are talking.

4. Say to yourself, 'I am not afraid; I know that I can make all the sounds in the English language. I will try to speak them easily and well.'

5. Use pleasant, agreeable tones. Try to get out of a jerky, unrhythmic monotone in speech, if such is your usual way of speaking.

6. Eat plenty of fruits and green, leafy vegetables when you can secure them. Avoid eating sweets to excess. Do not spend your allowance for candy.

7. Eat slowly and masticate your food thoroughly.

8. Exercise each day out of doors for at least two hours.

9. Keep a cheerful, pleasant attitude all the time.
10. Don't worry about your speech. It is worry which sends it off into a jerky, unpleasant utterance. Calmness and control of yourself whenever you begin to speak, will give you easy, fluent utterance if you practice it often enough.

11. Remember that it will take time to improve, but begin now to relax and make up your mind that you are going to conquer your speech habits rather than let them master YOU!

12. Read "The Americanisation of Edward W. Sok", and like him seek every possible occasion to improve yourself, to talk with interesting people, to take some of the social responsibility of each occasion upon yourself, and thus direct the development of your own personality.¹

"RELAXING

1. Drop your head forward on your chest. Let it hang until it seems to pull the body down its own weight. Dangle the arms loosely. Without bending your knees, allow your head to descend toward the floor. When your relaxed fingers touch the floor without the slightest stretching, resume the upright position. Repeat this relaxation several times. Be sure that you are slumping, not stretching, to the floor. This sometimes called the 'rag-doll' exercise.

2. (To be given in class or taken at home.) Lie flat and straight on the floor, not on a couch or bed. Place your arms at right angles to your body. Turn your toes

¹Sarah W. Stinchfield, Speech Pathology with Methods in Speech Correction, pp. 92-93.
upward and point them as much as possible toward your face. At the command, 'Stretch!' given silently or aloud to yourself, stretch hard to the heels and to the tips of your middle fingers. When the maximum sensation of stretching is reached, give yourself the command, 'Relax!' Lie quietly for a moment.¹

"BREATHING EXERCISES"

1. Lie flat on the floor, or on a bed. Relax completely. Place one hand on the waistline and one on the abdominal muscles. Breathe naturally. Notice that in inhalation the lower part of the chest cavity and the abdomen expand and that there is very little movement of the upper part of the chest. This is due to the fact that the lungs are much larger at the bottom than at the top.

2. Stand erect. Place your hands as before. Inhale and exhale. Be careful that the lower part of the chest and the abdomen expand and contract, and that there is little activity of the upper chest.

3. Stand erect. Place your hands as before. Inhale; then push the breath out on the sound 'oh', intoning the sound and holding it as long as you can comfortably do so. Be sure to push the tone out steadily, using the abdominal muscles. Inhale again (through both mouth and nose); then send

the breath out steadily on the sound, 'ah.' Inhale and ex-
hale, sending the breath out steadily on the vowels and
diphthongs.

4. Stand erect. Place one hand on the chest and one on the
abdominal muscles. Inhale, and as you exhale, push all the
air out suddenly on the sound, 'oh,' thus giving the effect
of an explosion. The push with the abdominal muscles
should be so forceful that the wall of the upper chest will
be lifted up by the sudden impact of the air from below.
Do the same with the other sounds given above, practicing
on the round and open sounds first, until you are sure of
the breathing.

5. Stand erect. Place the hands as in Exercise 4. Inhale
and exhale, prolonging the sound, 'oh,' while you count to two
mentally, and then exploding the sound. In this case, the
sudden push with the abdominal muscles should come at the
end of the tone.

6. Stand erect. Place one hand on the abdominal muscles
and the other on the waistline. Inhale, and say 'one.'
Inhale again, and say 'one, two,' pushing a little farther
in with the abdominal muscles for 'two' than for 'one.'
Inhale, and say 'one, two, three,' pushing in still farther
with the abdominal muscles for 'three' than for 'two.' Con-
tinue this exercise, counting to five, and as you acquire
greater breath control, to ten and fifteen.¹

"TONGUE EXERCISES"

These exercises are done with the aid of a small hand mirror.

1. Stretch the tongue out and down until it touches the point of the chin. Rest. Repeat this exercise smartly to a count of eight. Relax.

2. Stretch the tongue-tip up towards the tip of the nose. Rest. Repeat this exercise as before. Relax.

3. Alternate (1) and (2). For the first four counts, alternate without rest; then rest and relax. Repeat the count of sixteen in all.

4. Curl the tip of the tongue backward toward the soft palate. Rest. Repeat four times. Relax.

5. Place the tip of the tongue behind the lower front teeth and bulge it out. Rest. Repeat four times. Relax.

6. Place the tip of the tongue behind the upper front teeth and bulge it out. Rest. Repeat four times. Relax.

7. Combine (5) and (6) without a rest for four counts, then relax. Repeat the group four times. Relax.

8. Place the tip of the tongue behind the upper front teeth; allow it to fall flat on the floor of the mouth. If you open your mouth wide for this exercise, the tongue gets a maximum of exercise. Repeat eight times. Relax.

9. Groove the tongue; draw it back into the mouth, blowing out the while. The directions are as follows: groove, blow, rest. Repeat eight times. Relax.
10. Rotate the tongue around the lips. Begin at the right side of the mouth. Commands are 'up, around, down, in.' Repeat four times. Relax.

11. Repeat (10), beginning at the left. Repeat four times. Relax.

12. Alternate (10) and (11).

"LIP AND JAW EXERCISES"

1. At the count of 1, pout the lips. At the count of 2, relax them.

2. At the count of 1, spread the lips. At the count of 2, relax them.

3. At the count of 1, lift the right-hand side of the upper lip. At the count of 2, relax it.

4. At the count of 1, lift the left-hand side of the upper lip. At the count of 2, relax it.

5. At the count of 1, thrust the under lip forward. At the count of 2, relax it.

6. Spread the lips and say 'e' (i:); open the mouth wide and say 'a' (a:); round the lips and say 'oo' (u:).

7. Say the diphthongs 'ow' (au) and 'oi' (i), exaggerating the positions of the lips and jaw.

8. Say 'e' (i:), 'a' (a:), 'oo' (u:), 'ow'(ou),'oi' (i).

9. Repeat the sound 'p' several times in rapid succession, as follows: 'pppppppppppppp.'

10. Say 'pip-pap'; 'tip-tap'; 'snap-snap.'
11. Repeat the sound 'b' several times in rapid succession:
  'bbbbbbbbbbbbbbbbbbbb.'
12. Say 'tib-tub'; 'dib-dab'; 'sib-sab'; 'bibble-bobble';
    'bibble-bobble'; 'bibble-bobble.'

Do all of the above exercises several times daily."¹

"SOFT-PALATE EXERCISES

1. Say, 'ah.'
2. Yawn (patient notes rising of palate).
3. Say slowly, emphasizing each sound, 'ung-ah'; 'ung-ah';
   'ung-ah'; 'ump-ma'; 'ump-ma'; 'ump-ma.'
4. Imitate the ringing of a bell, 'ding-dong'; 'ding-dong';
   'ding-dong,' prolonging the 'ng' softly.
5. Say 'ing-ick'; 'ing-ick'; 'ing-ick,' prolonging the 'ng'
   and making the 'k' stop short and sharp."²

²Lee Edward Travis, Speech Pathology, p. 209.
Lesson Subject: To break up bodily tension.

Assignment: Breathing and relaxing exercises.

Objectives: 1. Appreciation of freedom.
2. A skill in relaxing, and diaphragmatic breathing.
3. A habit of relaxing and diaphragmatic breathing.

Procedure: Have the children do the following:
Stand erect and breathe deeply. Now put hands on the bottom ribs, a little to the front, with the fingers facing forward. Inhale and push the fingers about a half inch or inch apart. Exhale and feel the hands come together.

Group breath in unison. The diaphragm is like an umbrella. Upon inhaling, the umbrella opens, exhale and it closes.

Pretend to blow up toy balloons. Blow an imaginary sailboat across a lake. Do all of this exercise using the diaphragm.

Every art is based upon relaxation. Do the rag-doll exercise.

After you are limp and near the floor, stop thinking of a rag-doll, and pretend to be an elephant. Your two arms are his trunk; swing them lazily in the wind. Around, around, around.
Each time there is a strain, or you feel afraid, breath diaphragmatically, and relax all over.

LESSON PLAN

Lesson subject: To energize the tongue, lips, and jaws.
Assignment: Drills in lip exercises and tongue exercises.
Specific objectives: 1. A habit of moving the lips when conversing.
2. A skill in tongue twisting.
3. An appreciation of clear-cut consonant sounds and rounded vowel sounds.

Procedure: For lazy lips and jaws.
1. Purse lips as if blowing out a candle flame.
2. Say "aa--ee--ii--oo--uu--" stretching the lips as widely as possible on each sound.
3. Drop the jaw open, loosely, like an idiot.
4. Open the mouth, try to make the lower jaw rotate in a complete circle.
5. Say "oo--ee--oo--ee" several times, pursing the lips as far out as possible.

To strengthen lazy tongue.

Stick out your tongue at yourself.

1. Try to touch the tip of the nose with the tip of the tongue up-in. 8 counts.
2. Tongue out and down to tip of chin. Down in. 8 counts.
3. Place the tip of the tongue behind the upper front teeth ridge. Press. Rest. 8 counts.
4. Place the tip of the tongue behind the lower front teeth. Spread it and bring the middle of the tongue against the upper teeth. Under-up-rest. 8 counts.
5. Roll up the sides of the tongue like a funnel and blow. Roll-blow-rest. 8 counts.
6. Raise the edge of the tongue to the edge of the upper teeth. Mushroom tongue-rest. 8 counts.
7. Raise and lower the middle of the tongue. (combine 4 and 5.) Under-up-roll-rest. 8 counts.
8. Rotate the tongue about the lips as if there were molasses on them. To right. Up-around-down-in. 4 counts. To left. Up-around-down-in. 4 counts.
9. Sat "tot-t-t-t-t-t-t-t-t-

Practice:
1. The kitchen clock click-clicked.
2. A black cake of curious quality.
3. We wind the clock every winter's eve.
4. We walk down a winding road while the wind whistles wearily.
5. The sheik oiled his beard anew to stop the itching.
7. Six long slim, slender, sleek saplings.
8. Long and loudly little Lily laughed.
LESSON PLAN

Lesson subject: Voice quality.
Assignment: Define quality, time, force, and pitch.
Specific objectives: 1. A habit of giving music to the voice.
                    2. A skill in voice placement.
                    3. An appreciation of voice beauty.
Activity: Learn by doing.
Procedure: Review lesson plans on lips, jaws, and tongue.
Quality is the thing that differentiates your voice from others.
Time is the rhythm of your individual voice.
Quality—long, short, slow, fast.
Force is degree, not loudness.
Pitch is the location of sound on musical scale.
These three factors make up quality.
Time:
Read in the Southern drawl five original sentences.
Read same sentences with excitement.
Put pause in.
"Woman without her man is a brute."
wife
"A man going to see his/asks the prayers of the people."
Force:
Say "oh" in a stage whisper. Shout it.
Make a three-minute speech, using a forceful manner.
Pitch.

Locate your key of speech on the piano.

Go down from that place as low as you possibly can. Practice.

Now find your level, or key again.

Go up from that place as high as you can. Practice.

Vocal Variety:

Start the alphabet slowly; speed up toward the end. Reverse; start fast, and slow down.

Start the alphabet in a whisper, end in a shout. Start loud and end with a whisper.

Start with a low key and end on your highest note. Start high, and come down the scale.

Get out of a monotone.

Say "oh!" expressing joy, horror, doubt, surprise, suspicion, pain.

Now find a very emotional poem and read it in various emotions.

Say,

"I thought he would fail.

Yes, I like her.

He said I could go.

The quality of mercy is not strained.

An honest man is the noblest work of God."

In various emotions,

say,
Good morning, Mr. Brown.

Our Father who art in heaven.

Darling, I adore you.

Oh, how tired I am.

Get out of my sight.

I'd give the world to be in Paris.

All â€” the rise.
A. FUNCTIONAL DISORDERS

1. Baby-talk.

Case history Al. The patient was a child enrolled in the fourth grade. Her father and mother used excellent English, but as she was their first child, they talked baby-talk to her. At the age of nine, her speech was so cluttered with babyish jabbering that it was nearly impossible for any one unaccustomed to her manner of speech to understand her.

It was not altogether imitation of her parents' manner of speaking to that caused her speech handicap. She was a highly nervous child and had an over-shot upper jaw which made the faulty enunciation much easier.

For three years she had been attending a clinic for remedial work but the results had not been favorable.

One day she joined the Demonstration School clinic because one of the instructors had formerly lived in her home. It so happened that the child idolised her instructor, and her one ambition was to be like her.

The sounds the child had never made were "t," "d," "b," "p," "k," "g," "s," "ng." She substituted "ch" for "s" and "dz" for "z" and "w" for "r."

In her efforts to please, the child showed immediate improvement under the new instructor's drills. At the end of four and one-half months, when the director made the check-up, it was found the child could make
perfect "s" sounds, and could mimic the consonant sounds.

The end of nine months the child had greatly improved. She could now be understood by anyone. However, the instructor advised that she be taken to the dentist as he would be able to correct/defect--that of malocclusion. The dentist said that if she wore braces on her teeth for a few months, she would have a normal mouth, and her speech would also be normal.

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The speech handicap of baby-talk is a serious functional disorder which should be overcome before the sufferer reaches adulthood. Such a defect could be considered "cute" in a small, delicate child, but when that child reaches middle age and still refers to small rabbit as "widda wabbit" it is no longer "cute" but definitely ridiculous. Baby-talk is the result of erroneous interpretation and production of sounds.

There is a great similarity of opinion of speech authorities concerning the cause of, and the cure for, baby-talk. This similarity is shown by the following excerpts from books written on the subject.

"No more common speech defect prevails among younger school children than faulty sound substitutions, most of which are in the nature of so-called baby-talk. Substituting "th" for "s," as in "thithter" for "sister," and "wo" for "r," as in "Wabbit" for "Rabbit," are
common examples of faulty sound substitutions. It is really surprising how many cases of infantile speech are to be found among children of the grammar school and high school. According to the Oregon speech survey, made in 1928, there are probably several hundred cases of infantile speech among the older school children in the state.¹

"'Baby-talk,' where the child cannot make all the sounds of his own language, is necessary stage in speech development, but baby-talk should be left behind by the age of four to five years. During this stage, the centers of the brain which control the speech functions are being trained. The constant hearing of sounds gradually trains the auditory center of the brain, and the child begins to appreciate and recognize the difference between them."²

"Another cause of functional defects is faulty training or a poor speech environment. If a child hears 'baby-talk,' he is very apt to ape it. Unwise parents often give their children this type of stimulation. It is fortunate that a large majority of 'baby-talkers'

¹ W. Arthur Cable, A Program of Speech Education in a Democracy, p. 411.
overthrow their defect because of correct stimulation from other than parental sources. Occasionally 'baby-talk' is found among college students particularly among girls. Because their speech has been pronounced 'cute' or 'adorable' they have not discarded it.¹

¹In some children, what seems to be infantile speech or 'baby-talk' persists long after it should have been eradicated. In a few of such cases, the home environment may be responsible for the alalia prolongation, but usually the only factor that can rationally be connected etiologically with the defect of speech is the shortness of auditory memory span.²

¹Lee Edward Travis, Speech Pathology, p. 211.
²Robert William West, Disorders of Speech and Voice, p. 75.
LESSON PLAN

Lesson subject: To correct the habit of infantile speech.
Assignment: To learn the "r" sound.
Specific objectives: 1. A knowledge of the "r" sound.
   2. A skill in moving the lips and tongue.
   3. An appreciation of faultless sounds.

Activity: Learn by doing.
Procedure: The baby talker often substitutes "w" for "r"
or leaves the "r" sound entirely out of his speech.

It is necessary to groove the tongue before a perfect "r" sound can be made. If the child cannot
groove his tongue, teach him to groove it around a pencil.
He can hold the grooved tongue in place with his fingers.

The "r" sound is made by pointing the front of the
tongue toward the roof of the mouth and curling it ever so
slightly back toward the soft palate. Due to the fact that
all "r" sounds are not pronounced in American phonetics, a
rule for the pronunciation of the "r" is to pronounce it
when it appears initially in the word or before a vowel in a
syllable. It is never pronounced when it follows a vowel
in the same syllable.

Drill: rah-rah-rah; ra-ra-ra-ra; ree-ree-ree;
Words: reel rat rather berry hurry
rid run write cherry merry
wren rule round ferry very

Memorize:

Drrress Mary, quite contrary,
How does your garden grow?
With silver bells, and cockle shells,
And pretty maids all in a row.

LESSON PLAN

Lesson subject: To correct the habit of infantile speech.
Assignments: To learn the "th" sound voiced ("then"), and "th" voiceless ("thin").
Specific objectives: 1. A knowledge of the "th" sounds.
2. A skill in moving the lips and tongue.
3. An appreciation of faultless sounds.

Activity: Learn by doing.

Procedure: The failure to make the correct "th" sound is often found in the lisper and the tongue-tied child as well as the baby-talker. The error is made when the tongue is placed between the upper and lower teeth to produce the sound. Press the tip of the tongue lightly against the edges of the front teeth and send the breath or the voice against this barrier. The correct position can be obtained by inserting a tongue-guide (a small paper-knife or a glass rod) or the
finger between the teeth. The pupil cannot make his usual faulty sound around such an obstacle and the sound is much nearer right.

Drill: (voiced "th")

thah-thah-thah; tha-tha-tha; thee-thee-thee;
thaw-thaw-thaw; thoh-thoh-thoh; tho-thoo-thoo.

(voiceless "th")
asth-asth-asth; ath-ath-ath; eeth-eeth-eeth;
au-th-au-th-au-th; ooth-ocht-ocht; ooth-ooth-ooth.

Words: thistle this thigh thy thane they loath loathe bath baths wreath wreathe

Sentences:
1. "Breathes there the man with soul so dead." -- Scott
2. The victorious youths were wreathed in garlands.
3. I never thought that you would do this thing to Theodore.
4. That thimble is there in the other room.

LESSON PLAN

Lesson subject: To correct the habit of infantile speech (baby-talk).

Assignment: To learn the "k" and "g" sounds.

Specific objectives: 1. A knowledge of the "k" and "g" sounds.
2. A skill in moving the lips and tongue.
3. An appreciation of faultless sounds.

Activity: Learn by doing.
Procedure: The "k" sound is made by raising the back part of the tongue to the roof of the mouth, or soft palate, and sending the breath out with a slight explosive. Add voice to that plosive and the sound will be the "g." In infantile speech the "t" sound is often substituted for the "k," while the "d" is used in place of "g."

Drill: kah-kah-kah; ka-ka-ka; kaa-keee-keee
   kaw-kaw-kaw; koh-koh-koh; koo-ko-ko-ko;
gah-gah-gah; ga-ga-ga-ga; gee-gee-gee;
gaw-gaw-gaw; goh-goh-goh; goo-goo-goo.

Words: kay geese back bag biaker bigger
       kettle get fact fag lucky luggage
       cat Gatling rack rag knuckle nugget

(Use the above words in sentences; as many words as possible in one sentence.)

Memorize:

Kuh! Kuh! A kernel of corn
In my throat is caught,
Kuh! Kuh! Kuh! Out again,
And more corn bought.

Goosey, goosey, gander
Whether shall I wander?
Upstairs and downstairs,
And in my lady's chamber.
LESSON PLAN

Lesson subject: To correct the habit of infantile speech (baby-talk).

Assignment: To learn the "f" and "v" sounds.

Specific objectives: 1. A knowledge of the "f" and "v" sounds.
                   2. A skill in moving the tongue and lips.
                   3. An appreciation of faultless sounds.

Activity: Learn by doing.

Procedure: The upper teeth rest lightly on the lower lip. If the breath flows through this space, the resulting sound is the voiceless fricative "f." If the voiced air flows through the small space, it will be the voiced fricative "v." Often the child presses or bites the tongue rather than allowing the teeth to rest lightly on the lip, thus producing a "th" sound instead of an "f" sound. If he rounds the lips rather than assumes the correct position, he will produce the "w" sound for the "v."

Drill:  
fah-fah-fah; fa-fa-fa; fee-fee-fee;  
faw-faw-faw; foh-foh-foh; foo-foo-foo.  
vah-vah-vah; va-va-va; vee-pee-pee;  
vaw-vaw-vaw; voh-voh-voh; voo-voe-voe;  
shf-shf-shf; af-af-af; eef-eef-eef;  
avf-avf-avf; ohf-ohf-ohf; oof-oof-oof.  
ahv-ahv-ahv; av-av-av; eov-eov-eov;  
avw-awv-awv; ohv-ohv-ohv; oov-oov-oov.
Words: veal feel fever reefer alive life
vine fine favor sauer gloves rough
vane feign rover sofa five five.

Use the above words in sentences.

Sentences:
1. Following are four famous forecasting factors.
2. "Unheedful vows may heedfully be broken."
3. Fight for freedom.
4. All's fair in love and war.
5. None but the brave deserves the fair.

Memorize:

Every fiddler he had a fine fiddle,
And a very fine fiddle had he;
"Twee, tweedle-dee, tweedle-dee," went the fiddlers three.

Oh, there's none so rare as can compare
With King Cole and his fiddlers three.

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Valentine, O Valentine!
Curl your locks as I do mine;
Two before and two behind,
Good-morrow to you, Valentine.
LESSON PLAN

Lesson subject: To correct the habit of infantile speech (baby-talk).

Assignment: To learn the "w" and "wh" sounds.

Specific objectives: 1. A knowledge of the "w" and "wh" sounds.

2. A skill in moving the tongue and lips.

3. An appreciation of faultless sounds.

Activity: Learn by doing.

Procedure: Round the lips and let the voiced air flow through them. The sound thus produced is the "w" sound. With the lips rounded, send voiceless air through them. The sound is the voiceless fricative continuant "wh."

Drill: wah-wah-wah; wa-wa-wa; wee-wee-wee;
    waw-waw-waw; woh-woh-woh; wee-wee-wee;
    ahw-ahw-ahw; aw-aw-aw; ew-ew-ew;
    awh-ahw-ahw; ohw-ohw-ohw; oow-oow-oow.

Words: we wheat wot what wile while
       witch which wight white wail whale
       wen when wine whine wear where

Sentences:
1. Which shall we plant, winter wheat or buckwheat?
2. Winifred wore a white sweater when we went to Winstead on our wheels.
3. "To the gull's way and whale's way, where the wind's like a whetted knife!"—Mansfield


5. I wish I knew when you wanted to wind the clock.

LESSON PLAN

Lesson subject: To correct the habit of infantile speech (baby-talk).

Assignment: To learn the "y" sound, (written phonetically "j").

Specific objectives: 1. A knowledge of the "y" sound.
                       2. A skill in moving the tongue and lips.
                       3. An appreciation of faultless sounds.

Activity: Learn by doing.

Procedure: In producing the "y" sound, the front of the tongue is raised until it nearly touches the hard palate. The narrow opening thus made lets the "y" sound escape. In babyish speech, this sound is often left entirely out.

Drill: yah-yah-yah; ya-ya-ya; yee-yee-yee;
       yaw-yaw-yaw; yoh-yoh-yoh; you-you-you.

Words: ye year young yolk yonder tube tunic tutor yet yearn youth yea yard music due duty

Use the above words in sentences.
Sentences:

1. Yield, ye youths, ye yeomen, yield your yell.

2. Were you in your back yard yesterday?

3. There was a hue and cry last year when the young duke was lost over yonder.

4. Years ago, yea, years ago duty was the tutor of the day.
2. Lisping.
Case history A. 2. The patient, a girl of thirteen, was engaged in conversation in a freshman speech class. She was unaware that she had any speech difficulty. When she was told that she lispèd, she was very anxious to overcome it.

Her father was American and spoke perfect English, but her mother was of French descent. There was no physical defect in either parent or in any of the other children in the family. Upon close questioning, it was learned that her mother had all of her teeth removed just after the birth of the patient. As they lived in the country and trips to the city were infrequent, the mother did not have a plate made until after the baby's third birthday. By that time, all of the child's speech habits had been formed and the lisp was an imitation of her mother's toothless speech.

The girl had grown up without realizing that she had a very definite speech handicap. She had been the pet in all of her classes, as everyone thought her "cute" with her infantile lisp.

The sibilant sounds were difficult for her to learn because of the long habit of the lisping.

At the close of the first four and a half months, the director of the clinic found that the patient had still not overcome all of the lisping. "s" was her most difficult sound since she could not hiss it. However, after nine months of constant drill, the lisp was taken out of her speech
entirely.

Listed is the mispronunciation of the sibilant sounds. There are three forms of lisping: lingual, lateral, and nasal emissions.

Lisping can be caused from laziness. A child suffering from "lazy lisping" can be cured quite easily if he has the determination to cure himself. This defect can also be organic instead of functional. Should it be organic, the child should see a doctor or dentist and remove the organic disturbance which is producing the handicap. Usually, lisping is simply the inability to make the correct sounds, phonetically. A teacher of phonetics can easily cure the lisper of his handicap by segregating the sounds he is unable to make and showing him just where those sounds are made and how to make them.

The opinions of the speech authorities on lisping are quoted in the following pages:

"A tongue that is not normal is frequently the cause of speech faults. An overly large tongue may cause thickened or mumbling speech, and sometimes lisping. Persistent drill is remedy."\(^1\)

"Lisping may be defined as any habitual mispronunciation of the sibilant sounds. They are 's,' 'z,'\(^1\)

'sh,' 'ts,' 'dz,' The commonest mispronunciations are of two types--lingual protrusions and lateral emissions. Sometimes the lateral emission is so exaggerated that it becomes a snort and this is known as nasal emission. Many girls in high-school age feel that a lisp adds to their attractiveness. The psychologists tell us, however, that it is a sign of prolonged infantilism, so any student who is interested in appearing adult will want to correct this fault.\(^1\)

"Lisp ing may be due to missing teeth, hare lip, lip paralysis, short frenum, microglossia, macroglossia, prognathism, arched narrow palate, cleft palate, improper dental arches, obstructions in the nose and throat, weakness of the tongue muscles, malocclusion, and paralysis of one side of the soft palate. Some of these cannot be remedied by anyone, but the teacher should have the benefit of a medical and dental examination before any corrective training is undertaken.\(^2\)

"Nonorganic lisp ing is usually either an: infantile, lingual lisp or a slight blurring of all of the sibilants. It is usually most conspicuous in the final sibilants, which frequently seem to be omitted completely.

"A careful analysis of the production of this lisp usually shows a lack of activity on the part of the tongue tip and the lower lip.\(^3\)

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2. E. Travis, Speech Pathology, p. 207.
"Certain mispronunciations of sibilants ("s," "z," "sh," "ch," and "j") are termed lisping.

"With the normal jaw formation, the English 's' is usually made with the tongue in the position for sounding 't' except that a narrow channel forms at the tip through which the breath comes with a hissing sound. The 'z' is made in the same way, except that the voice is added.

"The normal 'bite' is with the upper teeth slightly overlapping the lower. They should be nearly closed in sounding 's'; that is, the edges should be in about the same horizontal plane. There should be no lateral movement of the jaws, nor should the jaw be thrust forward to bring the edges of the teeth together. When there is a decided over-shot condition, it may be possible and advisable to bring the lower jaw forward to the normal bite position. In other cases of malformation, the correct sound may be approximated in various ways. Sometimes, particularly with cases of open-bite, it may be best to place the tip of the tongue at the base of the lower front teeth, drawing back the front of the tongue from the teeth to form a little pocket. In such cases, the lower lip may be allowed to compensate, thus closing the opening which cannot be closed by the teeth. Care can be taken that the lip does not so function when there is no malformation. A whistled 's' often results from lip interference. Individual work must be done with extreme cases and the method made to fit the
condition.

"Three forms of lisping are lingual protrusion, (the 'th' sounds, voiced and unvoiced, are substituted for the 's' and 'z' sounds) lateral emission (instead of sending the air out over the tip of the tongue, the air escapes over one or both sides of a rather lax tongue) and nasal emission (sending the air through the nasal cavity.)"¹

"Lisping may be defined as any habitual mispronunciation of the sibilant sounds. The sibilants are 's,' 'z,' 'sh,' 'zh,' 'ch,' and 'j.' There are three general types of lisps........any of these defects may be functional, organic, or emotional."²

¹Alice L. Wood, The Jingle Book of Speech Correction, p. XXVII.
²R. B. Manser, Speech Correction on the Contract Plan, p. 56.
LESSON PLAN

Lesson subject: To master the sibilant sounds.
Assignment: To learn the "s" sound.
Specific objectives: 1. A knowledge of the "s" sound.
                        2. A skill in moving the tip of the tongue.
                        3. An appreciation of correctly placed sounds.

Activity: Learn by doing.
Procedure: To make the "s" sound, the teeth are brought close together, but do not meet. The tip of the tongue is free, while the sides of the tongue touch the teeth. The middle of the tongue is slightly grooved. The air should come through that groove of the tongue and hit the teeth in a hissing sound.

Should this method of "s" production be impossible for the child, "s" can be made correctly by lowering the tip of the tongue to the lower gum ridge. Some people can produce the correct "s" sound by rolling the tip of the tongue slightly back in the mouth.

The essential thing about the "s" sound is to have the teeth close together, the middle of the tongue grooved and the tongue tip free.

Learn to groove the tongue. If it is impossible by imitation, take a pencil and put it in the middle of the tongue.
With your fingers, hold the edges of the tongue around the pencil. Practice until it is not difficult to put the tongue edges around the pencil. Now withdraw the pencil carefully and blow diligently through the newly created groove. Continue to practice in this manner until a groove can be made without the aid of a pencil.

Miss: 

Drill: 

Practice: 

Memorise and say slowly:

To sea, to sea, my sailor?
Go sail a salty sea;
Out on a tide at sunset
And bring back a song to me.
LESSON PLAN

Lesson subject: To master the sibilant sounds.
Assignment: To learn the "s" sound.
Specific objectives: 1. A knowledge of the "s" sound.
2. A skill in moving the tip of the tongue.
3. An appreciation of correctly placed sounds.

Activity: Learn by doing.
Procedure: A "s" is made in the same way that an "z" is made. The only difference is that the "s" is hissed or voiceless and the "z" is voiced. If the child puts his hand on the teacher's throat while she says "s" and leaves it there while she says "z", he will feel the difference between a voiced and voiceless sound.

Drill:  
sah-sah-sah
sa-sa-sa-sa
zoo-zoo-zoo
saw-saw-saw
zah-zoh-zoh
zoo-zoo-zoo

Now combine the "s" and "z" sounds:

sah-za  sa-zah  sa-zah
sa-za  sa-za  sa-za
Write 25 sentences with the "s" sound and 25 with the "z" sound.

LESSON PLAN

Lesson subject: To master the sibilant sounds.

Assignment: To learn the "sh" and "zh" sounds.

Specific objectives: 1. A knowledge of the "sh" and "zh" sounds.

2. A skill in moving the tip of the tongue.

3. An appreciation of correctly placed sounds.

Activity: Learn by doing.

Procedure: The position of the tongue has been learned in making the sounds "s" and "z." Simply modify those positions, with the tongue flatter and more relaxed, with the groove broader but shallower, and the voiceless "s" becomes the "sh" while the voiced "z" becomes "zh."
Practice:

sheen pressure shut pleasure fish garage
shine meshes sure lesion fresh assure
shed garish sugar fusion lash measure

Now use each of the above words in a sentence.
Make one sentence using as many of the above words as is possible.

Illustration: The sheen of the meshes was assure in the garish light.

LESSON PLAN

Lesson subject: To master the sibilant sounds.
Assignment: To learn the "ch" and "j" sounds (when phonetically written it is "sh.")
Specific objectives: 1. A knowledge of the "ch" and "j" sounds.

2. A skill in moving the tip of the tongue.

3. An appreciation of correctly placed sounds.

Activity: Learn by doing.
Procedure: Before studying these sounds, practice the "t" sound and the "d" sound in lesson plans.

These sounds are a combination as is indicated.
"Ch" is made by joining the voiceless plosive "t" to the voiceless sibilant fricative "sh" to make "ch" as in "church."
In "j" the blade of the tongue is place firmly against the teeth ridge and is pulled away hurriedly by the explosive sound, while the passage is blocked enough to produce the fricative sound in "judge."

Drill: 
chah-cha-chee-choh-chaw-choo
jah-jah-jee-joh-jaw-joo
chah-jah; cha-ja; chee-je; choh-joh; shaw-jaw; choo-choo;

Words: cheese, chat, shore, charm, lures, notches, etch, watch, jestor, juice, joggle, agitate, dodes, ledge, Sarcoke.

Make sentences from the words above.

Sentences:
1. Charlie is my chum.
2. I chased him around the chair.
3. My chum has a gold chain.
5. Cheese and cherries never agree with Chester.
6. Jenny ate the jam.
7. During June and July all juices are popular in Japan.
8. The sage judged the jumping events judiciously.
9. Joan watched Jake, Judy, and Jane besidge their imaginary giants.
10. A grinder adjusted the hydrogen.

Case history, A.J. A boy lived near Denton and heard of the speech clinic. He knew he had a speech defect but was not certain just what it was.

His case was diagnosed by a competent helper. It was found that he and his parents were American and used fairly good English in the home. His mother mumbled when she talked, but there was no definite physical defect in either parent.

The boy's greatest handicap was nasality. Every word had a nasal tone which was irritating to the listener. Part of that nasality was due to an injury. He had broken his nose several years earlier, but it was not injured past use. It was quite possible for him to close the nasal cavity with the soft palate when he concentrated on the task.

It was found that more nasality was shown when he was forced to address several people, because he raised his voice in order to be heard above the crowd.

Besides nasality, the patient was very lazy-lipped and his speech sounded as if his tongue never moved nimbly.

After four and one-half months of supervised drill, with a monthly check-up by the director of the clinic, the nasality was nearly gone from the boy's voice, and his lips and tongue moved rapidly. When he became excited, he fell back into the former habit, but he could immediately hear himself when this was done, and he constantly tried to
overcome all nasality in his tones. He realized that a habit of many years' standing could not be overcome in a few months, so he never became discouraged.

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Nasality is one of the most common speech errors made. Its many organic causes may be partly responsible for its universal prevalence, but laziness or relaxed velum is its most popular cause. It is only natural when one is suffering from some physical ailment to speak in/voice most easily produced. Thus it is easier to allow the soft palate to lie idle and let the breath stream flow out through the nose. After one recovers good health, the habit of talking with the relaxed soft palate is so fixed that to talk any other way would seem unnatural.

As nasality results from the relaxed velum, it is necessary to learn to control that speech organ. The person suffering from nasality should locate his soft palate and try to understand just what sounds make it quiver, respond, or try to close the pharyngeal opening; these are the sounds that should be drilled on until the soft palate again accustomed itself to opening and closing the nasal cavity.

The speech authorities say the following about nasality:

"Nasality is that distortion of the natural timbre or quality of the voice which is due to too great a proportion of nasal resonance. Nasality is the opposite of denasalization and consists of having too much nasal
resonance for the amount of mouth resonance."¹

"When a person has large adenoids, the closure of the velum is made against them. After they have been removed, the velum may continue to make the same amount of movement as before. This leaves a gap between it and the rear wall of the pharynx which causes all sounds to be nasalized. Thus, not only the presence of adenoids but the relaxed palate after their removal may cause defective phonation..."²

"Hypernasality may be due to cleft-palate, post operative tonsil traumatic relaxation of the palate in the aged, postadenoidal speech, velar insufficiency, or any combination of these. On the other hand, it may result simply from bad habits. With the etiology of nasality in the mind, the teacher should see the advisability of obtaining medical assistance."³

"Nasality that is habitual may be ultimately due to the following causes: a, poor speech models...;b, general sluggishness of response;(I use this rather clumsy phrase to cover what many less charitable folks would style laziness.)c, habits formed during some previous adenoid stenosis of the nasopharynx."⁴

"When a speaker gives a general effect of nasality it means that the soft palate, which should move upwards to

¹L. Raubischeck, Voice and Speech Problems, p. 326.
³Ibid., p. 207.
⁴Robert West, Disorders of Speech and Voice, p. 119
close the passage to the nose for every sound except the nasal consonants, is not doing its work properly; i.e., some air is escaping through the nose. The degree of nasality varies with different speakers. Most people nasalize, to a certain extent, the vowels in the neighborhood of nasal consonants, but if more than the normal amount of nasality occurs, the effect is noticeable and felt to be unpleasant.........To cure this is not an easy matter. The first thing to be aimed at is the control of the soft palate.¹

"There are two outstanding types of nasality. The first is due to a relaxed velum, which permits too great a proportion of over-tones to be made in the nasal cavity. The second type of nasality is characterized by a tension of all the resonating surfaces of the mouth, the pharynx, and the nose. This quality is 'tinny' and aggressive in character."²

"Nasality is the result of too much nasal resonance. Every normal voice must have a certain amount of nasal resonance. There are three nasal sounds in English: 'm,' 'n,' and 'ng'............if other sounds particularly the vowels, are spoken with a nasal resonance, the whole tone takes on an unpleasant quality, known as nasality. In order to overcome this fault, you must learn to control the soft palate, which acts as a curtain between the throat

¹I. C. Ward, Defects of Speech, p. 43.
and the nose and head cavities, and may be raised and lowered at will.  

\(^1\)

LESSON PLAN

Lesson subject: Control of the soft palate.
Assignment for this lesson: To determine whether all sounds are nasalized or just part of them.
Specific objectives: 1. To control the soft palate.
2. A knowledge of the speech organs.
3. A skill in opening and closing the nasal cavity.

Activity: Learn by doing.
Procedure: Introduce the breathing and relaxing exercises.
Instruct the pupils as follows:

With the aid of a mirror locate the parts of the speech mechanism which are visible. Watch while you touch your tongue to your upper and lower lips, your upper and lower teeth, upper and lower gums, hard palate and soft palate. See if you can touch your uvula with your tongue.

Say "ah" while looking into the mirror. Be sure to stop up your nose when saying it.

Say "gaing" with your mouth open and watch tongue and uvula. The sound will be something like "ga-a" but watch the movement.

Listen closely while the patient reads, or speaks and find out if all sounds are nasal or just part of them. If all of the vowel sounds are nasal, it is useless to
start with them. However, "i" (phonetic symbol for sound in "he") is usually found free from nasality. If it is free from nasality in the patient, have him pronounce it several times, in words, to notice the action of the palate when he says it. He should say it a great number of times. Before each sound, stop and yawn. Feel the soft palate. Carry that feeling into the word.

Practice: ("i" as in "he.")

N----i, m----i, m----i, m----i;
i----m, i----m, i----m, i----m.

Raise and lower the soft palate. Listen for nasality in the voices of others. Listen to a voice with no nasality in it. Hear the difference between the two. Practice yawn-
ing.

LESSON PLAN

Lesson subject: Control of the soft palate.

Assignment for this lesson: Vowel sounds free from nasality.

Specific objectives: 1. To control the soft palate.

2. A knowledge of the speech organs.

3. A skill in opening and closing the nasal cavity.

4. A skill in hearing nasality in others.

Activity: Learn by doing.
Procedure: Review the "i" sound free from nasality.

Yawn.

Give the practice material of the first exercise perfectly.

Now add to the "i," which should be correctly free from nasality, the second front vowel, "I," as in "is." Practice the two together several times.

i-I, i-I, i-I, i-I, i-I,
I-i, I-i, I-i, I-i, I-i.

Practice:

i-i-i-i-i-i-i-i-i   I-I-I-I-I-I-I-I-I-I
ii-ii-ii-ii-ii-ii-ii   II-II-II-II-II-II
iii-iii-iii-iii-iii-iii   III-III-III-III-III
iiiiiiiiiiiiiiiiiiii   IIIIIIIIIIIIIIIIIIIII

After this sound is mastered, continue with the front vowels; then take the mid vowels, continuing through the back vowels and beginning the consonants.

Stop the child constantly and make him yawn.

Develop within him the awareness of the palate.

LESSON PLAN

Lesson subject: Control of the soft palate.

Assignment for this lesson: Re-diagnose the case.

Specific objectives: 1. To control the soft palate.

2. A knowledge of the speech organs.

3. A skill in opening and closing the nasal cavity.
6. A skill in hearing nasality in others.

Activity: Learn by doing.

Procedure: After listening to the student's voice and having him go through the first drills in the first lesson plan, should you find all the vowels nasal, it is best to begin with "z." This consonant is seldom nasal. If it is nasalized, it cannot be understood as it must be bussed.

Instructions for the student:

Take a deep breath and say "z" until the breath is all gone.

Take a deep breath and say z-z-z until the breath is gone. Pass from "z" to "i," as in "he.

z-i; z-i; z-i; z-i; z-i; z-i
s-i; s-i; s-i; s-i; s-i; s-i
s-i; s-i; s-i; s-i; s-i

Now say "i" as in eat. Is it free from nasality? Yawn; then say eat. Now go with "z" to "I," then "z" to "za," then "su" through "so."

In the practice, the teacher must remember that it will be necessary several times to go back to the sound that is not nasalized.

Practice and re-practice the vowel sounds until all of them are free from nasality. Remember to introduce them by the sound "z."
LESSON PLAN

Lesson subject: Control of the soft palate.

Assignment of this lesson: An acquaintance with the consonants.

Specific objectives: 1. To control the soft palate.
  2. A knowledge of the speech organs.
  3. A skill in opening and closing the nasal cavity.
  4. A skill in hearing nasality in others.

Activity: Learn by doing.

Procedure: Review all of the vowels. Make sure there is no nasality in any of them.

Most people can say the last syllable in the word, "mutton," with no vowel between "t" and "n." Say this combination several times; "ntntntntntntntnt," keeping the tip of the tongue on the teeth-ridge. The explosion that can be felt and heard is due to the escape of the air through the nose when the soft palate leaves the wall of the pharynx. The pupil should practice this drill until he is conscious of the position of the soft palate before the explosion, i.e., during the position of the "stop" of the "t," when the tongue is raised. Similar exercises can be practiced with the combinations, "pnpmpmp," keeping the lips together all the time; "dndmdndm," same position of the tongue as far
as "tn", "kng," and "gng," with the back of the tongue raised to touch the soft palate.

Now comes the most difficult part of the palate control. This is the alternation of oral and nasal vowel (aaa, EEE) when the pupil directs the breath stream alternately through the mouth and through the nose as well as the mouth by the movement of the soft palate. The power to do this indicates a considerable degree of control. The sounds are said in one breath.

When all the vowels can be said in isolation without any nasal tone, and not before, they should be practiced in words. It will be more difficult when they occur before or after a nasal consonant. Try dividing the sound by a pause (m—sik) and gradually diminish the pause.

LESSON PLAN

Lesson subject: Control of the soft palate.
Assignment of the lesson: A practice of words and sentences with no nasality.
Specific objectives: 1. To control the soft palate.
2. A knowledge of the speech organs.
3. A skill in opening and closing the nasal cavity.
4. A skill in hearing nasality in others.
Activity: Learn by doing.
Procedure: Review all former lessons. Make sure there is no nasal sound in any of the vowel or consonant sounds.

Words:
be, east, hit, in, bevy, fee, hat, cat, bird, girl, about, sofa, up, love, who, root, book, pudding, obey, obedience, jaw, thought, hog, dog, car, tar, ate, be, peep, wheat, feed, dart, rather, choice, azure, pace, yet, key, bringing, stronger, plunge, heat, harm.

Sentences:
1. The boys and girls had a fine time at the party.
2. He said he felt "fit as a fiddle" and "right as rain."
3. Richard the Lion-Hearted went on a Crusade.
4. The sound of many voices came echoing up the stairs.
5. The handsome man came from the south of England.
6. The train came laboring up the long, lonely mountain side.
7. It will be high tide at five o'clock today.
8. "Piper, pipe that song again."
9. The victorious army made a triumphal march.
10. "Time and tide wait for no man."
4. Denasality.

Case history A. 4. The pupil in this case was a girl, fifteen years old and a sophomore in high school. Her parents were American. Her mother's speech was impaired by sinus trouble, defective breathing and poor hearing. The girl was very nervous and easily exhausted.

Her defect was diagnosed as denasalization. Although she had her adenooids removed twice, she continued to talk as if her nostrils were stopped up. An occasional word would be nasalized, showing that there was no physical prevention causing the denasalization. The girl continuously breathed through her mouth.

The girl was very anxious to clear up her voice and was an eager pupil. Every exercise the instructor gave her she drilled on. She had learned correct breathing and all of the correct oral sounds. Still her voice was denasalized when she became tired.

The instructor accompanied her to a physician and he told them there was no physical obstruction in the nasal cavity. The instructor gave the girl a rigid schedule of rest, eating, relaxation, and drill. She also suggested sleeping with a strap around her head and chin to keep her mouth from falling open.

At the check-up with the director of the speech clinic after four and one-half months the girl was greatly improved. She was determined to overcome all of the un-
pleasant qualities left in her voice.

Denasalization is the opposite of nasality. There is not enough resonance in the tones of a person suffering from this speech disorder.

Many physical handicaps may cause denasalization, but it can also be caused by laziness, mouth breathing, etc.

There is no conflict of opinion among the speech authorities as to the general conditions or the treatment of denasalization. Some of the opinions of the authorities are quoted below.

"Intranasal obstructions interfere with head resonance to change the quality particularly of the nasal sounds. 'm' tends to become 'b' and 'n,' 'd.' Often nasal obstructions are only temporary, as in severe colds when the turbinates become swollen and the nasal cavities are more or less closed."\(^1\)

"Hyponasality may be due to sinusitis, hypertrophied tonsils, enlarged turbinates, deviated septum, enlarged adenoids, nasal polypi, or a combination of these."\(^2\)

"Stoppage of the nasopharynx or the nares produces a type of speech disorder that may be designated as denasalization.....this condition robs the sounds 'm,' 'n,' and 'ng'\

\(^1\)L. E. Travis, *Speech Pathology*, p. 201.
\(^2\)Ibid., p. 207.
of their proper nasal resonance."

"Denasalization means that there is too little nasal resonance. This difficulty may be the result of a catarrhal condition or of chronic sinus infection, but it is most likely due to excessive adenoid tissue."\(^2\)

"Denasalization is the opposite of nasality. It results from the lack of sufficient nasal resonance. Although some people who talk in the dull lifeless voice which is characteristic of this defect are not suffering from any pathological obstruction of the nasal or the nasopharyngeal passages, in almost every case the original cause of the disorder lay in such an obstruction and the person is merely continuing his speech habits after the cause has been removed. The first step in treating a case of denasalization, then, is to have a thorough physical examination by a competent nose specialist to make sure that no adenoid or other growth is present in the nasal passages. If these growths are present, they should be removed not only from the point of view of improving the speech, but also as a fundamental health measure. Chronic inflammation of the membranes caused by chronic catarrh might also result in the diminution of the resonating capacity of the cavities. It is essential, then, that any treatment for denasalization should be preceded by a physical examination and by what-

\(^1\)R. W. West, *Disorders of Speech and Voice*, p. 39.

ever physical care the physician finds necessary."¹

LESSON PLAN

Lesson subject: To overcome denasalization.
Assignment: To learn the mechanism of resonance (see page 17)
Specific objectives: 1. A knowledge of the part resonance plays in speech.
2. A habit of correct breathing.
3. A skill in phonetics.
4. An appreciation of resonance in speech.

Activity: Learn by doing.
Procedure: Stress the fact upon the child suffering from denasalization that he must practice the resonance sounds if once he feels the vibrations. Never hurry the child over a lesson. Spend as much time as you feel necessary on one sound. Do not rush! Remember one lesson plan could last a week, with small variations. The thing to impress on the child is to strive for perfection in an isolated sound.

Discuss the mechanism of resonance. Have the children hum on their natural pitch. Start from there and work down the scale until they have reached the lowest key they can sound. Practice the downward slide until it becomes a habit. Now find the natural pitch again and hum upward to the highest note. Practice until that, too, becomes a habit. Alternate humming with breathing and relaxing exercises.
LESSON PLAN

Lesson subject: To overcome denasalization.

Assignment: Learn the phonetic symbols and sounds (see page 149)

Specific objectives: 1. A knowledge of the part resonance plays in speech.

2. A habit of correct breathing.

3. A skill in phonetics.

4. An appreciation of resonance in speech.

Activity: Learn by doing.

Procedure: Practice the vocal variety in humming. Start with, "Our father which art in Heaven," on the lowest pitch possible, and come steadily up with the following sentences:

1. Darling, I adore you.
2. Oh, how tired I am.
3. Get out of my sight!
4. I'd give anything in the world to be in Paris!
5. Oh, if I could only learn to sing like that!
6. Oh, I'm so happy!

(Say the last sentence as high as possible, sounding convincingly happy.)

Be sure that the throat is relaxed.

Hum:

[Phonetic symbols]
Practice the following exercise very rapidly.

dropping the jaw each time on the final "ah!"

many-any many-any many-any many-any many-any-shhh

Hun:

many many many many many many many many many

Hold the "n" for a count of five in each of the

following words:

- twenty seventy ninety
- twenty seventy ninety
- twenty seventy ninety

Hun:

ng ng ng ng ng ng ng ng ng ng ng ng

Practice, holding the "ngs"

ding-dong sing-song Hong-Kong

ding-dong sing-song Hong-Kong

LESSON PLAN

Lesson subject: To overcome denasalization.

Assignment: Drill on resonance sounds.

Specific objectives: 1. A knowledge of the part resonance plays in speech.

2. A habit of correct breathing.

3. A skill in phonetics.

4. An appreciation of resonance in speech.
Activity: Learn by doing.

Procedure: Hum "m," "n," "ng," and draw it out as long as possible, feeling it resound in the head.

Place hands over upper part of face, covering eyes, nose, and lower part of forehead and hum, try to feel the vibration when humming.

Sing each of the following syllables, holding the last sound for five counts:

ning ahm ahm
ling an am
ning een een
ming ohm ohm
ding oon oon

Speak the above syllables, holding the last sound for five counts.

Place hands over nose and eyes; repeat:

Sing a song for me.

"Ding, dong, ding, dong," went the bell.

Many men sang the songs.

The sound of the bell rang through the room.

"Boom, Boom," went the fog horn.

"Ring out the old, The year is going-
Ring in the new. Let him go!
Ring, happy bells, Ring out the false,
Across the snow. Ring in the true."

--Tennyson
LESSON PLAN

Lesson subject: To overcome danasalization.

Assignment: To learn about the soft palate.

Specific objectives: 1. A knowledge of the part resonance plays in speech.
2. A habit of correct breathing.
3. A skill in phonetics.
4. An appreciation of resonance in speech.

Activity: Learn by doing.

Procedure: Yawn. Start the air for the yawn through the nose first. Look in the mirror and move your soft palate up and down. Say, "mugg" several times. Now say, "come, cough, could, can't." Do the breathing exercises, and relaxing. Hum, normal pitch: "nmmmmmmmm;" "nnnnnnnnnnn;" "nnnnnnnnnnggggggggggggggg." Hum, low pitch, "m," "n," "ng."
Hum, high pitch, "m," "n," "ng."

Drill: My soon no same
Mary not song name
Mother never sing Sam
Make muffins. Climb mountains.

Write phonetic symbols for the above words.

Repeat these sentences:
1. Mary will sing a song for us.
2. Mother never same.
3. My son's name is Sam.
4. No, Mary will not make fudge.
5. It will soon be time to climb the mountain.

Write sentences in phonetics.

LESSON PLAN

Lesson subject: To overcome denasalization.
Assignment: General review.
Specific objectives: 1. A knowledge of the part resonance plays in speech.
2. A habit of correct breathing.
3. A skill in phonetics.
4. An appreciation of resonance in speech.

Activity: Learn by doing.
Procedure: With a mirror, look in the throat; move the soft palate rapidly. Look as far down the pharynx as possible. Name the resonance chambers. Do the breathing and relaxing exercises. Pant, feeling your soft palate rise and fall. Say,

ung-ah; ung-ah; ung-ah;
ump-pa; ump-pa; ump-pa;
ing-ick; ing-ick; ing-ick.

Hum: m n ng

Go rapidly from very low to very high. Throw all the tones possible into the front of the head.
Drill: (Be sure to feel the vibration in the nose and head.)

ma ma ma
ma ma ma
mi mi mi
mo mo mo
moo moo moo

Now substitute "n" and "ng" for the "m" and drill.

Repeat:
1. I have a police whistle.
2. Alice did her work.
3. What do you see there?
4. A chair stood by the sofa.
5. I bought baby a hat.

LESSON PLAN

Lesson subject: To overcome denasalization.

Assignment: To exercise the resonance chambers.

Specific objectives: 1. A knowledge of the part resonance plays in speech.
2. A habit of correct breathing.
3. A skill in phonetics.
4. An appreciation of resonance in speech.

Activity: Learn by doing.
Procedure: Hum:

many
twen
many
ding

Practice over and over again:
hung-ee
hung-ay
hung-oo
hung-oh
hung-ah

Memorise the following (When reciting, dwell long on the resonant sounds).

Minna, Monna, Nina, me
Mark the maidens marry,
Mounted many a maple tree,
And murmured, "Not a cherry!"

"Moo-moo-moo," mooed the muley cow,
On Monday morning in May.
"Mary may have a mug of milk;
May I have a mouthful of hay?"

They moan and groan and groan and moan,
Those moping old moldy stones.
But oh, oh, those doleful tones,
When the cold gets into their bones.
5 and 6. Indistinct, careless tones.
Case history, A.5 and 6. A small girl was sent to the clinic by the second grade teacher.

Her mother and father were American, speaking good English, but they had never noticed that their child had a speech handicap. The child, when called upon, would smile and duck her head. When she started talking, her speech was perfectly audible, but the more she talked, the more she would mumble and jumble her words together.

She responded to no drills.

She was tested as to I. Q. and it was found that she was far below the mind level of children her age. Her case was dismissed as there was nothing to be done for the speech of such a child.

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A boy in the eighth grade came to the clinic and said that he wanted to learn how to talk.

Upon diagnosing his case, it was found that his parents both spoke well. His trouble was mumbling, swallowing his words, and rushing through them in a slovenly way.

It was found that his ambition had suddenly changed and he wanted to be a radio announcer. Such an ambition for one so poorly qualified showed that he was willing to work. He did work very hard.

After nine months of supervision, his speech had greatly improved. It was not entirely free from errors,
but the mumbled, swallowed words were spoken out clearly. He was
determined to work all of the carelessness out of his voice and did not
care how long he had to work for it, if in the end, he heard the
desired effects in his own speech.

Careless, muffled, indistinct voice tones are every thing that their names designate. For a clearer
perception of these terms, speech authorities have said the following about such speech.

"The first step in improving vulgar or careless speech should be careful, systematic voice training to teach
modulation and control, and to add richness to the quality. This training in voice should immediately improve the qual-
ity of the vowels by obtaining a more open production. And a more open production will counteract one of the chief
characteristics of vulgar speech, which is pinching, flattening, and nasalizing of vowel sounds."¹

"Abnormalities of the uvula may be listed under abnormal length and thickness, bifurcation, and double
uvula. They interfere with the functioning of the organs of articulation by causing the uvula to act as a foreign
body in the pharynx and by pulling down on the soft palate to prevent its rising in the production of the vowels. Due
to them, speech is muffled."²

²E. E. Travis, Speech Pathology, p. 201.
"Among the unpleasing qualities of voice one may find the acute, shrill, coarse, raucous, dull, gloomy, melancholic, guttural, harsh, nasal, husky, metallic, strident, 'throaty' tones. Under pitch difficulties we find the high-pitched, infantile voice; also the monotonous, sharp, sombre, toneless, subdued, and flat. Poor breath control and weak volume of tone gives a muffled, dead thick tone, or one which is faint and of poor carrying power. It may be breathy, aspirate or thin, as it lacks in strength and intensity due to insufficient amplitude of the sound waves."

"Immobility of relaxed lips and lazy tongue or from a rigid jaw, tight lips, and a thick, stiff tongue. In either case the attack should be upon the method of production rather than upon the pronunciation of isolated sounds. It is folly to drill upon consonant combinations when the whole speech pattern is being warped by rigidity or too great relaxation. General setting-up exercises of the tongue, lips, and jaw should be given to free this mechanism for good speech production. Tongue twisters have their place in developing a nimble tongue and a rapid and delicate adjustment of the articulators. Sometimes the student is intrigued by demonstrations of how little real effort is required to make speech understandable where articulation is precise and delicate.

1 Sarah A. Stinchfield, Speech Pathology with Methods, p. 35.
"While this is the immediate corrective program, it must be repeated here that its success will depend upon the ability of the teacher to free the student from the inhibitions or conflicts that were responsible for the distortion in the first place. What is true of muffled speech is true of its opposite, overenergized speech. The corrective program is the same in each case."¹

"Careless speech usually consists of poor enunciation, but it may include incorrect pronunciations, such as 'reconize' for 'recognize' and 'apron' for 'apron.' The careless speaker usually substitutes 'd' for 't,' or omits it altogether, except at the beginning of a word, and shows a lamentable tendency to omit final and middle 'd.' If you discover that your speech is slovenly, you will, of course, be eager to clear it up."²

"We ourselves are serenely unconscious that our voices are not passing sweet. It is only the voices of those about us which rasp our nerves—the shrill, the husky, the throaty, the hard, the nasal voices of our neighbors.... the gurulous whine simulating a cry which we used to gain our childish ends would have proved an ineffective tool. That kind of cry cramped the tone passage as did everything else which was false. Fear and anxiety and failure to observe

health laws spoiled our voices. Then came constrictions of the tongue, the soft palate, the pharynx, and diaphragm. The happy, ringing tones gave way in some cases to muffled inarticulate sounds; in others, to harsh strident notes. To those who were starved emotionally came hard flat tones, and to victims of physical neglect, nasality of a distressing kind. The motor power of speech, which in childhood functioned perfectly, no longer operated smoothly. Instead of deep rhythmic breathing, the shallow, jerky type appeared. Thus were our vocal instruments tortured, and thus were our voices spoiled.¹

LESSON PLAN

Subject subject: Treatment for vulgar, muffled, careless speech.

Assignment for this lesson: Flexibility of tongue, lip, and soft palate.

Specific objectives: 1. To give the child a voice of which he can be proud.
2. A knowledge of all correct sounds, phonetically.
3. A skill in manipulating the organs of phonation.

Activity: Learn by doing.

Procedure: Drill on the lesson plan for flexibility of tongue and lips. Drill on breathing and relaxing lesson plans. If the vulgar, muffled or careless speech centers around the sibilant sounds, practice the lesson plans, pp. 54-59. Drills for consonant sounds are discussed thoroughly in lesson plans for baby-talk. Further drills will be found in lesson plans for tongue-tiedness.

Further exercises for the tongue.

1. With the tongue pointed, move it outward, downward toward the chin.
2. With the tongue pointed, move it upward, toward the nose, touching it if possible.
3. With the tongue protruding between the lips, wag it up and down as rapidly as possible.
4. Rotate the tongue around and outside the mouth. This should be done clockwise and counter-clockwise direction.
5. Protrude the tongue and form a groove through the center by raising the sides.
6. With the mouth wide open, curl the tip of the tongue back of the upper teeth.
7. Move the tongue in and out of the mouth as rapidly as possible.
8. Press the tip of the tongue against the back of the upper teeth until it rolls forward and outward between the upper and lower front teeth.
9. With the tongue pointed, dot the roof of the mouth in three places: the front, middle, and back.
10. Scrape the roof of the mouth with the point of the tongue going from front to back.

Lip exercises:
1. Protrude the lips in a puckered position.
2. Extend the upper lip outward and upward to touch the nose.
3. Pull down the lower lip, exposing the lower teeth.
4. With the teeth closed, say "ah--oo--ee--oo," "ah--oo--ee--oo," slowly and with vigorous lip action. Round the lips for "oo" and stretch them for "ee."
5. Say "we--woe--we--woo," "we--woe--we--woo," with exaggerated lip action. Spread the lips for smiling for "we" and round them for "woo."
Soft-palate exercises:
1. Say, "ah."
2. Yawn.
3. Say slowly, emphasizing each sound:
   - umg-ah; ung-ah; ung-ah;
   - ump-ma; ump-ma; ump-ma.
4. Imitate the ringing of a bell:
   - ding-dong; ding-dong; ding-dong.
   (Prolong the "ng" softly.)
5. Say:
   - ing-ick; ing-ick; ing-ick.
   (Prolong the "ng" and make the "k" short and sharp.

**LESSON PLAN**

Lesson subject: Treatment for vulgar, muffled, careless speech.

Assignment for this lesson: Phonetic drill.

Specific objectives: 1. To give the child a voice of which he can be proud.

2. A knowledge of all correct sounds phonetically.

3. A skill in manipulating the organs of phonation.

Activity: Learn by doing.
Procedure: Drill on phonetic alphabet. Drill on consonants and clipped, whole sounds. Say carefully:

acts, respect, complexities, recognizes, fifths, twentieths, thousandths, sequestered, frustrations, ignominous, inextricable, irrevocable, indefatigable, incomprehensible, idiosynracies.

Make a sentence using each word.
Make sentences, using as many words as possible in each sentence.

Memorize:

"How are thou out of breath when thou hast breath
To say to me that thou art out of breath?
The excuse that thou dost make in this delay
Is longer than the tale thou dost excuse.
Is thy news good or bad? Answer to that:
Say either and I'll stay the circumstances."

---Shakespeare

LESSON PLAN

Lesson subject: Treatment for vulgar, muffled, careless speech.

Assignment for this lesson: Clear diction.

Specific objectives: 1. To give the child a voice of which he can be proud.
2. A knowledge of all correct sounds phonetically.
3. A skill in manipulating the organs of phonation.

Activity: Learn by doing.

Procedure: Drill on the phonetic alphabet. Read aloud; read slowly, carefully, and give full attention to pronouncing each separate sound.

Words:
prettv, library, five cents, acts, asked, little, good, putt, put, cook~book, earn, class, man, bird, school, her, champion, hot, poor, pool, fur, mind, ice cream, pie, word, insane, aviator, exquisite, masks, radiator, mast, radio, telephone booth, coin, oil-burner, First Avenue, twenty, fifth, stenography, athletic, coupon, eighths, film, six, now because, going to, look, dog, elm, crowd, length, nice, height, radiator, absurd, absorbed, column, early, candy.

Make sentences with the above words.

Read the following paragraph first in a round, full, energized tone and then in a conversational tone:

"The old man sat by the stove and brooded. It was a stormy afternoon. The low moaning of the wind echoed
the low moaning of the ocean. It was a dark and cold day. All morning the storm clouds had glowered and gloomed, and at noon, the snow began to fall, slowly at first, but with more and more force as the afternoon wore slowly on. As the day drew to a close, the tolling of a bell announced a boat in trouble offshore. The boys tunneled through the snow to go to man the life boats, but the old, broken man sat by the stove and brooded."

LESSON PLAN

Lesson subject: Treatment for vulgar, muffled, careless speech.

Assignment for this lesson: Pure enunciation.

Specific objectives: 1. To give the child a voice of which he can be proud.

2. A knowledge of all correct sounds phonetically.

3. A skill in manipulating the organs of phonation.

Activity: Learn by doing.

Procedure: Drill on phonetic alphabet. Read aloud, slowly and carefully, and give full attention to pronouncing each separate sound.

Read the following sentences, slowly, clearly, and carefully:

1. These be times that try man's souls.
2. Self-activity is an essential in the cultivation of personality.

3. The fifth, sixth, and eighth rows may pass to the blackboard.

4. A unit may be divided into tenths, hundredths, and thousandths.

5. Springing up, the young man hung up his hat in the hall.

6. Running and jumping are healthful exercises.

7. The younger pupils were asked to assist the teachers.

8. He said he wouldn't give five cents a hundred for such trash.

9. The six bicyclists went out on the speedway to try for a new athletic record.

10. The champion golf player of modern times is Bobby Jones.

11. The boy acts in some respects as though he had lost his wits.

12. Our primitive ancestors celebrated their victories with elaborate feasts.

LESSON PLAN

Lesson subject: Treatment for vulgar, muffled, careless speech.

Assignment for this lesson: Appreciation of clear enunciation.

Specific objectives: 1. To give the child a voice of which he can be proud.

2. A knowledge of all correct sounds phonetically.
3. A skill in manipulating the organs of phonation.

Activity: Learn by doing.

Procedure: Drill on phonetic alphabet. Read aloud, slowly and carefully, and give full attention to pronunciation.

Say each of the following expressions explosively, three times on one breath:

- Oh no!
- Yo ho ho
- Now now.
- Don’t go.
- Come down.
- Blocks and stones.
- Your blocks.
- Your stones.
- Now now.
- Halt!
- Forward march.
- Go.
- Charge.
- Burrah.
- Blow, bugle, blow.

Read the following sentences:

1. The bell buoy tolled and tolled to warn of the shoal.
2. The boys are coasting down the road that goes to Goshen.
3. The countess was drowned on the voyage down the Rhone.
4. The old crone groaned and moaned in the gloaming.
5. The lonely road was long and hot.
6. He told me he sold his boat for forty dollars.
7. The old nobleman was cold and lonely.
8. He told the story of Ivanhoe on the long voyage.
9. "The loving herd winds slowly o’er the lee."—Gray
10. "Now, now, fool, whither wander you?"
11. "He sold his horses, sold his hawks and hounds."
12. "Down she came and found a boat
Beneath a willow left afloat,
And round about the prow she wrote
'The Lady of Shalott'.
7. Foreign Accent

Case history A. 7. The boy in this case was in the fifth grade in school. He came into the clinic willing to do anything to be like other boys of the fifth grade.

His case was diagnosed and it was found that he talked with a pronounced German dialect, his mother and father using German altogether around the home, and he stuttered. Upon inquiring, it was learned that he had been stammering for nearly a year.

Upon investigating his home life, friends, and acquaintances, it was found that the stuttering had been produced by the realization that he was not like the other boys when speaking, and the fact that his father had hired a "bully" type of large boy to work in his filling-station. The small boy was afraid of the larger boy. When the father was made to understand the cause of the child's stammering, he immediately dismissed the larger boy as his helper. Then the instructor in the clinic restored the child's confidence in himself and the stammering disappeared.

Still, the original speech defect, foreign accent, was in the child's voice. By constant drill, the guidance of an understanding instructor, and the co-operation at home, the child was able in nine months' time to rid himself of nearly all of his foreign dialect errors.
His case was pronounced arrested, but complete cure for his speech handicap, it was decided, would not be realized until after he left the home of his German speaking parents.

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Foreign dialect or accent is perhaps the most tedious speech defect to correct. Not only is it necessary to break down speech habits of long standing, but new speech patterns must be formed.

The following excerpts give the opinions of authorities concerning foreign accent.

"Under "Foreign Accent" are grouped all those omissions, substitutions, and additions of the sounds or syllables, and all those changes in speech melody which are due to the influence of a language other than English.

"The best way to correct this is to take a thorough course in English phonetics under the guidance of a teacher who can give the necessary assistance in ear-training and mechanics of articulation. Such a course should aim at a knowledge of the correct production and sound value of each isolated sound and of the changes in words which occur in fluent speech. There should be special attention given to accuracy in stress and length of sounds.

There are then three steps to be followed in eliminating dialect:
1. Each sound must be heard and produced correctly at will.

2. The principle and application of stress and of strong and weak forms must be mastered.

3. The general rules for English intonation must be mastered, and their application to specific situations practiced.¹

"Foreign accent refers to those deviations from accepted English usage in the pronunciation of vowels and consonants, in stress and intonation, which characterize the foreigners' use of English. If you wish to overcome a foreign accent, it will be wise for you to approach the study of language phonetically......There are certain characteristics found in the English of nearly all foreigners......They make the sounds 'd' and 't' on the teeth instead of the upper gum; they unvoice their final consonants and make other cognate substitutions; they substitute 'ng-g' or 'ng-k' for 'ng'; they lengthen vowels before voiceless consonants and shorten them before voiced consonants; they use strong forms where weak forms are necessary, and they frequently mistake the syllable which should be stressed; many of them substitute 'd' and 't' for 'th' voiced and voiceless."²


LESSON PLAN

Lesson subject: To correct foreign dialect.

Assignment for this lesson: Ear training.

Specific objectives: 1. A skill in hearing the various sounds.

2. A habit of producing the various sounds.

3. An appreciation of the English language.

Procedure: Give the child the phonetic chart. Have him repeat aloud all the sounds; be sure that he does not merely produce the letters. Have him distinguish the various sounds, not letters, of the following:

<table>
<thead>
<tr>
<th>Coleridge</th>
<th>Pope</th>
<th>Goldsmith</th>
<th>Rossetti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thittier</td>
<td>Shelley</td>
<td>Milton</td>
<td>Robinson</td>
</tr>
<tr>
<td>Wordsworth</td>
<td>Churchill</td>
<td>Burns</td>
<td>Stackpole</td>
</tr>
<tr>
<td>Blake</td>
<td>Hale</td>
<td>Payne</td>
<td>Gay</td>
</tr>
<tr>
<td>Bryant</td>
<td>Wilde</td>
<td>Dryden</td>
<td>Byron</td>
</tr>
<tr>
<td>Holmes</td>
<td>Dickens</td>
<td>Herbert</td>
<td>Byron</td>
</tr>
<tr>
<td>Prior</td>
<td>Theater</td>
<td>Discipline</td>
<td>Fitzgerald</td>
</tr>
<tr>
<td>Ichabod</td>
<td>Program</td>
<td>Debutante</td>
<td>Blithedale</td>
</tr>
</tbody>
</table>
Listen closely and distinguish the following sounds:

Peter, Peter, pumpkin-eater.
Kindred Kill Kinmen.
Said simple Simon to the Pieman.
The furrow followed free.
Yield, ye youths, ye yeoman, yield your yell.

Review the list of vowel sounds which the pupil has compiled.
Make a list of 10 words for each consonant sound.

LESSON PLAN

Lesson subject: To correct foreign dialect.
Assignment for this lesson: Segregation of sounds.
Specific objectives: 1. A skill in hearing the various sounds.
2. A habit of producing the various sounds.
3. An appreciation of the English language.

Procedure: Review all of the ear-training exercises. By this time the teacher should have a definite idea of the sounds that are particularly hard for the foreign child to make. Talk seriously with the child, find out his ambitions and desires and impress on him the seriousness of speech correction. If he has not discovered the sounds, he has the most trouble with, point them out to him. Concentrate on those sounds that he cannot make and drill by words,
sentences and paragraphs on those sounds.

LESSON PLAN

Lesson subject: The correction of foreign dialect.
Assignment for this lesson: Ear training.
Specific objectives: 1. A skill in hearing the various sounds.
2. A habit of producing the sounds.
3. An appreciation of the English language.

Procedure: As the child with a foreign accent has an ear that detects the sounds of his native language only, it is the teacher who must make him conscious of the sounds in the new language he is adopting. Have the child make a list of ten words containing each vowel sound. Drill and re-drill those lists. Have the child make a list of the voiced and unvoiced sounds. Read the following columns of words horizontally; then vertically.

<table>
<thead>
<tr>
<th>ise</th>
<th>niece</th>
<th>lit</th>
<th>tight</th>
<th>is</th>
<th>aye</th>
</tr>
</thead>
<tbody>
<tr>
<td>cap</td>
<td>aunt</td>
<td>father</td>
<td>ran</td>
<td>last</td>
<td>all</td>
</tr>
<tr>
<td>lay</td>
<td>eight</td>
<td>rat</td>
<td>class</td>
<td>sample</td>
<td>take</td>
</tr>
<tr>
<td>book</td>
<td>moon</td>
<td>put</td>
<td>spoon</td>
<td>spot</td>
<td>choose</td>
</tr>
<tr>
<td>there</td>
<td>here</td>
<td>sure</td>
<td>fair</td>
<td>sheer</td>
<td>rear</td>
</tr>
<tr>
<td>mean</td>
<td>bet</td>
<td>smear</td>
<td>fare</td>
<td>machine</td>
<td>clique</td>
</tr>
<tr>
<td>poor</td>
<td>floor</td>
<td>hour</td>
<td>sower</td>
<td>sure</td>
<td>door</td>
</tr>
<tr>
<td>hear</td>
<td>fear</td>
<td>beard</td>
<td>berth</td>
<td>tear</td>
<td>curl</td>
</tr>
</tbody>
</table>
LESSON PLAN

Lesson subject: To correct foreign dialect.

Assignment for this lesson: Intonation.

Specific objectives: 1. A skill in hearing the various sounds.
2. A habit of producing the various sounds orally.
3. An appreciation of the English language.

Procedure: After the teacher feels that the foreign child has mastered hearing the sounds and during the concentration on phonetics, the teacher should introduce the child to intonation.

Intonation is the melody, or tune of speech. Each country has a tune pattern particular to that country.

Professor Klinghardt worked out a system to insure the learning of any national intonation of any language. A horizontal line, or measuring line, is used to indicate the normal pitch of the voice. A heavy dot indicates a stressed syllable, while a very light dot marks the unstressed syllable. A dot must be used for each syllable. A dot with an up-glide (which resembles an upside down comma with the tail extended) denotes the rising inflection while a downward glide (the comma, with an extended tail) indicates the falling inflection.
Now, of course, each person will have a definite voice pattern, the same as he will have an individual voice quality.

Usually the American intonation is characterized by the falling inflection at the end of a complete thought; the up-glide marks all questions indicating the rising inflection; and generally, the first stressed syllable in an intonation group or phrase is higher in pitch than any other syllable in the group.

Example: I don't want to.

(measuring line) __________

See how many ways you can plot the following sentence:

1. I hate to go home.

(example) .................................

Assign the child the following sentences and have him plot them by American intonation.

1. Please, may I go, too?
2. No, I don't like her.
3. Yes, if you really want to.
4. But do I honestly have to tell the truth?
5. Well, who would expect to see you so soon?
6. Which way are you going?
7. Ruby would never have done that.
8. Why does life do this to me?
9. But think of all the wasted millions.
10. Isn't that just like a woman?
B. Organic Disorders

1. Tongue-tiedness

Case history B 1. A little boy of nine was suffering from the handicap left after the clipping of the frenum.

Diagnosing his case, it was found the child was living with his grandparents and neither of them had speech handicaps. The child, in actual talk, never made a 'k,' 'th,' 'g,' or 'n' and substituted 'ts' for 's' sounds.

When the instructor segregated the sounds for the patient, he could make them after her. One of his mistakes was saying 'uh-huhl' for uncle. He could say it phonetically 'un-k-l' after the instructor, but in talking, he would return to the other habit.

After three months of drill, and with noticeable improvement, the instructor used the last aid in her knowledge of speech correction—that of making the child ashamed of his tongue-tied, unintelligible speech. After a serious talk, the child philosophically assured his instructor that he would outgrow his speech handicap as both his father and his uncle had talked as he did until they were grown.

This case was a failure because of the lack of cooperation of the child's grandparents in giving the facts in the case, and because the child was not encouraged at home to talk differently.
Case history B 2. A freshman girl in high school came into the speech clinic, suffering from the inability to pronounce the consonants correctly. Upon examination, it was found that the fraenum held the tongue a little tight. She nor her family had ever realized that she was suffering from tongue-tiedness.

Upon advice of the director of the clinic, she went to Dallas to an oral surgeon and had the fraenum clipped.

When she entered the clinic again, she was very eager for all of the correction drills. She spent two hours a day in drill and tongue exercises. At the end of four and one-half months, all of the tongue-tied sounds had been erased from her speech.

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Although tongue tiedness is an organic defect, it can easily be overcome. The patient should have the doctor clip the fraenum, thus giving the tongue all of the freedom it needs for correct speech. It is not necessary to carry the child to an oral surgeon, unless there is one close at hand. The family doctor can perform the operation with no danger whatsoever to the child.

After the operation, it is the speech teacher's duty to erase all of the habit the child has of talking with a tongue that, for years, has been too short. The teacher should remember that the tongue must be made to
perform tasks that it has never done before, so all drills should center around tongue activity.

Speech authorities have said the following about the tongue-tie defect.

"In general, any tongue which cannot be extended beyond the teeth is not free enough for good speech. Theoretically, a tongue-tie would affect every sound. Practically it has the most effect upon those sounds which require the air to be completely or largely shut off at the anterior part of the oral cavity."¹

"The tongue-tie (ankyloglossia) is, in popular belief, most frequently considered the cause of durness. It arises from a thickened ligament of the tongue, lengthened in front, by which the body of the tongue is connected with the floor of the mouth up to or nearly to the tip."²

"Normally, the tongue is anchored to the floor of the mouth by a cord known as the fraenum, which allows the tip to move about freely but prevents the tongue from slipping down the throat in sleep. If an insufficient proportion of the tongue is left free because the fraenum is too short or because it is attached too near the tip, the articulation of all of the tongue-tip sounds will be modified. This condition is commonly known as tongue-tie. The sibilants are also affected, and the general pattern is that of the

immature, defective phonation type. The first step is to have the frenum clipped, if possible. This is usually an extremely simple operation which does not require the expert services of a surgeon, but may be performed successfully by the general medical practitioner. Certain cases, however, are inoperable because of the nearness of the cord to certain of the big blood vessels in the tongue. When operation is possible, it should precede the corrective procedures. When the frenum has been clipped, the speech teacher should initiate a regular course of exercises to encourage flexibility, energy, and control of the tongue. These exercises should include both general relaxation and expansion drills, and also phonetic practice in the exact production of the sounds of English.

"When the tongue-tied person is an adult, it will often be discovered that the tip of the tongue is not as well developed as in the back, and the corrective program, therefore, should include development exercises as well as the others indicated above."1

"In cases of tongue-tie, the frenum, the muscular tissue that joins the tongue to the middle line of the floor of the mouth, is too short. If it is only a little too short, it may be stretched by tongue exercises. If, however, it is very short, a competent surgeon should be consulted. It is a very simple operation to have the frenum slightly

1L. Raubianbeck, Voics and Speech Problems, pp. 219-221.
clipped, and thus lengthened.\textsuperscript{1}

\textsuperscript{1}R. B. Nansen, \textit{Speech Correction on the Contrary Plan}, p.
LESSON PLAN

Lesson subject: To correct the difficulty following tongue-tiedness.

Assignment: To learn the "t" and "d" sounds.

Specific objectives: 1. A knowledge of the "t" and "d" sounds.
    2. A skill in moving the lips and tongue.
    3. An appreciation of phonetics.

Activity: Learn by doing.

Procedure: The "t" and "d" are made in the same manner, except for one thing. The "t" is voiceless and the "d" is voiced. Press the tip of the tongue flat against the roots of the upper front teeth and bring it away suddenly as the air is exploded. With the voice following the explosion of air, the sound produced is a "d." When only the air is exploded, the sound of "t" is made.

Drill: (Pull the tongue away as rapidly as possible.)

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\begin{align*}
& t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-\end{align*}
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\begin{align*}
tah-ta-tee-taw-teh-toh-too; tah-ta-tee-taw-teh-toh-too
dah-da-dee-daw-deh-doh-doo; dah-da-dee-daw-deh-doh-doo
tit-tat-too; did-dad-doo; tit-tat-too; did-dad-doo
\end{align*}
\]
Words: two tap tie doe tea team tart tear
doo daddy day dip deem dart fade ride

Sentences:

1. Two and two are four.
2. Tom hurt his toe.
3. Tie Tabby to the tree.
4. Teddy is our Tom-cat.
5. I see the top of the tower.
6. Do your lessons, Danny.
7. Daddy, come to dinner.
8. Drop it near the door.
9. The day dawned dazzlingly beautiful.
10. Dip the dime in the deep water.

LESSON PLAN

Lesson subject: To correct the difficulty following tongue-tiedness.

Assignment: To learn the "l" sound.

Specific objectives: 1. A knowledge of the "l" sound.
                    2. A skill in moving the lips and tongue.
                    3. An appreciation of phonetics.

Activity: Learn by doing.

Procedure: The "l" sound should be produced with the front of the tongue spread wide, so that the sides touch the upper
teeth lightly. The tongue should touch the upper gum ridge at the same spot where it touches in producing the "t" and "d" sound. Do not curl the tongue too far back as the "l" sound will be "dark," thus producing a "vulgar speech" sound.

Drill: lah-lah-lah; la-la-la; lee-lee-lee; law-law-law; loh-loh-loh; loo-loo-loo.
ahl-ahl-ahl; al-al-al; cel-cel-cel; awl-awl-awl; ohl-ohl-ohl; ool-oool-oool.

Words: lead lull ballad lily clay
lilt lisle delicate lollypop play
loll Lowell fellow willy-nilly sleigh

Practice:
1. Live and learn!
2. Tell the bell!
3. Tell Tilly!
4. Lullaby Lilly.
5. Silly Milly.

Chant "bell, bell, bell, bell," until it seems a bell is actually ringing.

Now practice the combination of "l" with other consonant sounds: "pl," "bl," "sl," "cl," "kl."

Memorize: "Little drops of water,
Little grains of sand,
Make the mighty ocean
And the pleasant land." --Brewer
LESSON PLAN

Lesson subject: To correct the difficulty following tongue-tiedness.

Assignment: To learn the "n" sound.

Specific objectives: 1. A knowledge of the "n" sound.
2. A skill in moving the lips and tongue.
3. An appreciation of phonetics.

Activity: Learn by doing.

Procedure: The "n" sound is made by placing the tip of the tongue in the same position it took while producing the "t" and "d" sounds. The tip of the tongue remains in its place while the sound is produced, thus sending the voice through the nose.

Drill: nah-nah-nah; na-na-na; nse-nee-nee;
      naw-naw-naw; noh-noh-noh; noo-noo-noo.
      ahn-ahn-ahn; ohn-ohn-ohn; oon-oon-oon.

Exercise: nah nah nah nah nah nah
          lah lah lah lah lah lah
          nah nah nah nah nah nah
          lah lah lah dah dah
tah tah tah tah tah
dah dah dah dah dah

Words: knee grnat been sign cleaner banner
       no not now new Heed boon
net name soon noun tenor tiny
pen hen den ten man dinner

Use all of the above words in sentences, paragraphs.

Sentences:

1. Name the nine men who signed the amendment.

2. It is a boon to have a moonlight night for the president’s dinner.

3. "In Zanadu did Kubla Khan a stately pleasure dome decree
   Where Alph, the sacred river, ran through caverns,
   measureless to man,
   Down to a sunless sea." ---Coleridge

4. Man put a pin on the seat.

5. The runner soon ran his distance.

Now practice all lesson plans for the sibilant sounds.
3. Cleft Palate

Case history B 3. (NOTE: The following case study was submitted by Oliva M. Johnson, Head of the Speech Department of the North Texas State Teachers College.)

"Case history B 3 was a girl seventeen years of age who came into our clinic in November, 1936. She was sent by Mrs. Hanson. Her cleft-palate speech was so indistinct that I was unable to understand her when she told me her name. She was obliged to write it. This handicap had made her so self-conscious that she seldom tried to speak before strangers. One teacher told me that the child had sat in her class all one semester without opening her mouth. The teacher's impression was that the girl was stupid. She was amazed to find that she had an unusually bright mind, but had refrained from speaking for fear of ridicule.

"The cleft in her mouth extended from the anterior portion of the hard palate, clear across the soft palate and bisected the uvula. It was wide enough to insert a finger in the opening.

"I first took the patient to Dr. Oliver, a Dentist, who experimented with artificial palates made of wax. None of these improved her speech. For fifteen years or more she had accommodated herself to the opening in the palate, and artificial closure had no effect. Nevertheless we determined upon an operation. I succeeded in getting her a gratis operation by Dr. A. L. Frew of Dallas, one of the most eminent oral surgeons in the country.

"I took the patient to Dr. Frew in December. He found her tonsils to be involved and required her to have her
tonsils removed before he would operate, saying that he could run no risk of having his operation spoiled by tonsil infection. The patient's home doctor removed her tonsils during the Christmas recess.

"In three or four weeks her throat was well and Dr. Frew operated. This was at the end of the first semester in January. Through the co-operation of President McConnell and Mr. Ernie Tidity, Superintendent of Baylor Hospital, I secured free hospitalisation for her through the Dallas Rotary Club. She was in Baylor Hospital two weeks.

"Dr. Frew performed a beautiful operation. He scored the sides of the cleft and then sutured them together with twenty-four stitches. These were held in place by small metal clamps until union was complete. Today there is not even a scar to show where once the wide cleft bisected the roof of her mouth.

"Dr. Frew warned me in advance that the patient would not be able to talk any better after the operation than before. 'That,' said he, 'will be your job— to re-educate the muscles of speech.'

"It was a challenging task and my colleague, Mrs. Hardy, and I accepted it with enthusiasm. The girl entered Mrs. Hardy's voice and diction class, meeting three times a week, and came to us in the Speech Clinic once a week for checking and practice. She learned positions of the forty-eight speech sounds and how to make them with precision. By the end of the semester she was able to make each sound correctly, with the exception of the back plosives 'k' and 'g.' These she learned during the summer. She has continued her work in speech, taking courses 125 and 225, and today her speech is normal.
Her inhibitions have disappeared, and she has secured a teaching position for next year.

Olive M. Johnson

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After an operation for cleft palate, joining the two sides together, the primary lack of movement of the soft palate, which is a new thing, causes the incorrect speech. The problem, after the operation, is the control of that organ. The muscles are weak and need to be strengthened.

Authorities say of cleft palate:

"One of the worst types of defective speech due to an organic fault is that which arises from a cleft palate. The cleft is usually, though not necessarily, accompanied by a cleavage in upper lip. It is present at birth, and if not given proper treatment, always spoils the speech of the victim and causes other difficulties. The cleft palate can be corrected only by operation; and the earlier this can be performed, the more effective will the operation be.... Sometimes a series of operations are necessary. The cleft in the palate may be successfully closed several years after birth. The patient's speech will need retraining. So, in cleft palate cases, the task of the teacher is to endeavor to secure proper surgical treatment for the child, if the parents have
failed in this respect; and to recondition the speech of those whose articulation remain defective after an operation.\(^1\)

"Cleft-palate and harelip are closely associated. Speech with cleft palate is the opposite of that with intranasal obstructions. There is excessive nasalization in cleft-palate, as there is no velum or only a defective one to close the rear passage through the nose. Due to cleft-palate and harelip all sounds change their quality. 'n,' 'm,' and 'ng' are the least affected. So-called explosives become nasal, as do also the vowels."\(^2\)

"Cleft palate causes a more thorough going alteration of speech sounds than any other malformation. In severe cases, the speech is practically unintelligible. When the failure of closure of the fissure is at the posterior end, the soft palate shows a V-shaped gap, the point of which often extends forward into the hard palate........ Before attempting any training with a case of cleft palate, it is necessary to consider the feasibility of operative repair. The earlier such repair is accomplished, the easier will be the training of the speech; the first step after the surgical repair of the palate is the training of the patient voluntarily to close the opening into the nares......Next, is the phonetic retraining of the patient...\(^3\)

\(^1\) W. A. Cable, *A Program of Speech Education in a Democracy*, p. 408.
\(^2\) L. E. Travis, *Speech Pathology*, p. 201.
\(^3\) R. W. West, *Disorders of Speech and Voice*, p. 33.
"The most conspicuous of oral deviations is perhaps the cleft palate or cleft lip. Sometimes these two accompany each other, but it is quite possible for one to exist without the other. This congenital lack of closure may vary in extent from a tiny pin hole in the hard or soft palate to a wide fissure extending from the base of the nose to the pharynx.... In cases of cleft palate and cleft lip the work of the speech teacher does not begin until the oral surgeon has done what he can to repair the mechanism. The first duty of the speech teacher who is confronted with a case of this kind, therefore, is to advise the patient to consult the best authority on this type of work in the region or the country.... Most surgeons feel that the first operation (if a series is advised) should take place not later than at the age of two."\(^1\)

"In cases of cleft palate, the cleft, or cleft, may be in the lip (in which case it is known as bare lip), the hard palate, the soft palate, or merely the uvula, or it may extend from the lip through both palates.... After the surgeon has done all he can to alleviate the difficulty, the organs of articulation must be re-educated to meet the new situation."\(^2\)

"In the embryo, the palates are formed by two lateral processes which unite before birth. The line of

union extending from the front teeth back may be plainly felt by the tongue. It happens sometimes that these processes fail to unite and a child is born with what is known as a cleft palate....If an operation is completed before the speech habits are formed, the chances are that there may be no speech defect. But if the operation has been delayed or if there has been insufficient tissue with which to close the fissure properly, the child will need special speech training."

"General Corrective Means in Cleft Palate. About a month after the patient is discharged from the hospital, regular speech re-education may begin. The work should be based on two types of exercise, in general. The first is ear training, in order that the patient may hear voice quality resulting from a balanced resonance. Second, there should be regular and frequent exercise for strengthening the soft palate and giving it resilience. An experiment has been performed, using massage to assist in stimulation resilience of the soft palate; this procedure has not been generally adopted. Yawning exercises; exercises in contracting and expanding the palate; exercises in reciting sounds in pairs, one with the palate raised, the other with the palate lowered ....any one of these may be employed.

"Lastly, the correct production of the isolated sounds that previously have been acoustically impossible should now be taught. Attention should be drawn to the importance of having the breath stream proceed through the mouth rather than through the nose. A device, such as using a saucer or feeling the breath on the moistened finger, may be of assistance here. The younger the child the more easily are resilience and control established. It should be unnecessary to point out the importance of having this condition remedied before the child's reaction to his difficulty produces serious psychological disturbances.

"While it is highly desirable that a closure be affected through surgical aid, some cases may prove inoperable. In others, the parents are unwilling to consent to an operation. Even under such adverse conditions, much may be done by careful retraining to give the patient articulate speech, adequate for elemental human needs. The use of an obturator, or false palate, is advised when the closure cannot be affected surgically."¹

LESSON PLAN

Lesson subject: Correction of cleft palate.

Assignment for this lesson: A knowledge of the interior of the mouth.

Specific objectives: 1. A knowledge of the soft palate and its action.

2. An appreciation of proper speech.

3. A skill in speaking with no nasality in the voice.

Activity: Learn by doing.

Procedure: If the child has a cleft palate, soft or hard, a split lip (hare-lip) or split uvulae, he must first see a doctor and have the cleft sewed up.

Now the problem is up to the teacher to take the habit of cleft-palate speech out the child’s voice. She will need all of her ingenuity and knowledge to invent sufficient variety of exercises so as to prevent the child growing impatient and stopping the correction drill altogether.

The first object, after the child is familiar with the way the interior of his mouth looks, is to guide the air stream out of the mouth instead of through the nose. A feather on a piece of cardboard below the child’s lower lip and below the nostrils will tell whether the air stream is coming through the mouth or nose. One of the feathers will be blown off.
Exercise of blowing through the mouth should be given to strengthen the desire and will to send the air stream through the mouth. Have the child blow bubbles, play a mouth organ, shoot peas through a pea-shooter, whistle, etc.

Have the pupil draw in his breath quickly through the mouth with closely rounded lips. Describe first how he is to feel his soft palate rise, when this goes. At first the child may not feel a response from the soft palate but constant repetition of the quick breaths will develop a response in the soft palate.

The yawn position, in which the velum is drawn up and back by the muscles behind it, will strengthen the movement of the palate.

The pupil should practice holding his breath. At first he will not be able to do it, but after practice, he should be able to hold it to the counts of three. He should go on until he can hold it past fifteen.

LESSON PLAN

Lesson subject: To correct the habit resulting from a cleft-palate.
Assignment: The control of the soft palate.
Specific objectives: 1. A knowledge of the soft palate and its action.
2. An appreciation of proper speech.
3. A skill in speaking with no nasality in the voice.

Activity: Learn by doing.

Procedure: Pant like a dog; feel the air in the back of the throat coming out the mouth. Stop and yawn. Pant again. Yawn. Pant. Try to feel the soft palate respond to this exercise.

Drill: (Feel the soft palate react.)

nnn-ah nnn-ah nnn-ah; nnn-a nnn-a nnn-a;

nnn-e nnn-e nnn-e; nnn-ou nnn-ou nnn-ou;

nnn-oo nnn-oo nnn-oo.

Practice:

bring-est, ring-ing, gang-ster

When the child is familiar with the soft palate and learns to move it at will, continue with the lesson plans for nasality. Drill, too, on consonants.
C. Emotional Disorders

1. Aphonia

Case history Cl. A boy who was a freshman in college came into the speech clinic to have his trouble diagnosed.

He was a boy who had been well all of his life, but had a weak, under-nourished look. As he was nice looking, too, he was branded by the members of his own sex as a "sissy." To bear out their accusation, when he was called upon in class, he seemed to lose his voice and could not make himself heard from the back of the class room to the teacher's desk. It had taken sheer nerve for him to come to the clinic, as he was afraid for anyone to single him out for attention.

As his parents were healthy Americans and he himself appeared healthy, his instructor advised him to see a physician. His family doctor said there was no organic disturbance that could be causing the loss of voice.

The director of the clinic knew then that his difficulty was hysterical aphonia, produced simply from fright and lack of confidence in himself. The director inspired him to talk of himself, his dreams, and ideals, and encouraged him rather than laughed at him. The boy seemed to enjoy the privilege of talking to an older person about himself. With the drills, relaxations, etc. prescribed by the instructor, he soon overcame his native timidity, and was able to speak when called upon in any class.
Aphonia is that speech disorder which prevents the sufferer from speaking above a whisper. The speech authorities differ widely in their classification of this defect. Some of them insist that it is functional, while others insist that it is organic, and still others classify it as emotional.

As more proof points to hysteria as the cause for aphonia, this disorder has been cataloged as emotional throughout this thesis.

Some of the differences of opinion are shown in the following quotations.

"Aphonia is the loss of voice or phonation, due to psychic disturbances, to partial arrest of lingual development or to impairment of the vocal chords. It may be temporary or permanent. In voluntary whispering, we have an example of "aphonia." Congestion of the larynx during laryngitis is an example of loss of speech due to organic conditions. In severe cases of croup and whooping cough, it is possible that the larynx may become sufficiently congested to cause loss of phonation. Sometimes it has a functional rather than an organic basis....In character it is a whispered tone, or a hoarse, breathy tone in quality; in a severe form both phonation and whispered speech are lost."\(^1\)

\(^1\) S. A. Stinchfield, *Speech Pathology*, p. 31.
"Aphonia refers to an absence of voice that is not organic. The person suffering from this difficulty is perfectly capable of speaking in a clear tone if he thinks he can. He may begin speaking clearly and then, losing confidence, suddenly have no voice at all. He may be able to read aloud in a clear tone and still be apparently unable to speak aloud; or he may be able to speak in a clear tone and unable to read except in a whisper."¹

"Aphonia is the name given to that vocal disorder which makes impossible the production of a clear voiced sound. It may vary in seriousness from a slight huskiness to a total loss of voice. The first step in attempting a correction of this condition is to ascertain the cause. The most frequent causes are chronic catarrh, strained vocal bands, chronic laryngitis, nodules on the vocal bands, chronic nervous or physical exhaustion, hysteria, or faulty voice production."²

Lesson subject: To overcome aphonia.

Assignment for this lesson: Proper breathing and relaxing.

Specific objectives: 1. To give the child perfect confidence in himself.

3. A knowledge of the causes of aphonia.

3. The ability to overcome stage fright.

4. An appreciation of good diction.

Procedure: Aphonia is an emotional disorder, generally produced by fright. The first step when handling a child who suffers from aphonia is to see that he interviews his family physician. Aphonia can be caused by a mental disorder, venereal diseases, etc. Therefore the child should see his doctor to see there is no organic trouble.

After it is ascertained that aphonia is caused by a hysterical state of nerves, impress the method of relaxing upon the child (lesson plan, p. 30).

Stress the importance of the child building up his physical condition through long hours of undisturbed sleep, fresh air, proper food, and exercise. Do not let him become any more excited than can be helped. Practice breathing and voice exercises every day so as to have perfect control over the voice. Practice reading aloud alone.
This will build up confidence, and oral interpretation will not be so difficult. Speak slowly, smoothly, and distinctly. Convince him that he can speak in a clear unflurtering tone.

Remember that "stage fright" is merely increased tempo. When you feel tense and afraid to appear before a group, warm up, just as the coach has his football boys do. First, cause your blood to flow as rapidly as your heart is beating. This can be done by standing up and walking rapidly up and down. If it is impossible to stand on your feet, push down hard with your feet and flex and unflex your arms. Second, breathe deeply, fully, and slowly. Third, tense and relax your shoulders.

LESSON PLAN

Lesson subject: To overcome aphonia.

Assignment for this lesson: Proper breathing, relaxing, and a control over the soft palate.

Specific objectives: 1. To give the child perfect confidence in himself.
2. A knowledge of the causes of aphonia.
3. The ability to overcome stage fright.
4. An appreciation of good diction.

Procedure: Stand erect, firmly on both feet; feel your whole body in perfect harmony and ready to do your bidding. Inhale and expand the lungs. Be sure that you have enough breath in your lungs. Inhale audibly, if you feel that by
that method you take more air into your lungs. How many times can you count on one exhaled breath?

Locate your soft palate (lesson plans, p. 65)

Learn to control it perfectly. How proceed with the lesson plans for denasalization for the further correction of aphonia. The reason for developing more head resonance is that it will take the strain of speech from the vocal chords and release the tension of the throat which produced aphonia.
2. Stammering

Case history C 2. (NOTE: The following case study was submitted by Mrs. Myrtle Hardy, instructor in the Speech Department of the North Texas State Teachers College.)

"Patient's name: ________________

Instructor: Myrtle Hardy

Date: November 1, 1936

Case history: The boy, who was in the fourth grade, was ten years of age. His father was a farmer of average intelligence, but his mother was below average intelligence. They did not notice the boy's defect until their attention was called to it by the boy's teachers.

Type of defect: Stuttering

A. Stress placement.
B. Repetitions......p, b, t, d,
C. Substitutions......w for s, d for k (crow), r for f (Frank)
D. Intonation.......monotone
E. Breathing.......chest.......tenseness at diaphragm
Neurotic character traits:
   A. Non-social
   B. Timid
   C. Over-sensitive
   D. Bashful

Psychological abnormalities:
   (1) Cramps and spasms of the lips and lower jaw during speech
   (2) Cramps and spasms of the tongue during speech

Treatment:

1. Development of a desire for good speech
2. General phonetic instruction:
   patient was taught the correct position of speech organs for each individual sound.
3. Special phonetic drills
4. Habit formation drills
5. Exercises for relaxation
6. Breathing exercises
7. Drill in direct imitation
8. Tongue, lip and jaw exercises
   A. Stretching the tongue:
      grooving the tongue and trilling
B. Pursing, rounding, and spreading the lips

C. Stretching the jaw, relaxing the jaw."

Stammering is perhaps the most difficult emotional speech disorder to cope with. The cure of stammering depends on the methods the instructor employs when dealing with the patient. The psychological reaction of the patient plays an active part in his ability or disability to throw off this handicap.

There seems to be more experimenting in the field of stuttering than in any of the other speech ailments. All of the speech authorities advocate different methods when dealing with a stammering child. They agree, as a general rule, however, that stammering is an emotional disorder.

Some authorities use the word "stammering" to refer to cases in which the child is blocked in the making of certain sounds, and the word, "stuttering," to refer to cases in which the patient repeats rapidly certain sounds or syllables before being able to go on with his original thought. In this thesis the words, "stammering" and "stuttering," have been used interchangeably.
"Stammering is due primarily to a nervous condition. It is usually an over-tenseness of speech nerves."¹

"The symptoms of stammering arise as the direct or indirect result of the nonabsorption of certain mental processes into the main stream of consciousness. Certain desires occur to the patient which the latter must not only refuse to gratify but which, in deference to the dictates of a hypertrophied moral conscience, he feels he must refuse to acknowledge as a true part of his personality. Thus the symptoms of stammering, along with all other psychoneurotic symptoms, must be regarded as results of psychic malassimilation—psychic indigestion.

"Anxiety, which plays so important a part in the symptomatology of stammering, must be interpreted as the patient's fear of himself—of the perverse, criminal, and social desires which he has clamped down in the cellar of his mind. It is the fear of inadvertently revealing the presence of these hidden desires through speech that is responsible in a large measure for the stammerer's malady. The case here, therefore, is one of fear, as an inhibitory idea, checking the course of a normally automatic function."²

"One of the most serious functional disorders of speech is stammering. Also, it is the most baffling in respect both to causation and treatment....This functional

¹I. C. Ward, Defects of Speech, p. 63.
²Richard C. Borden, Alvin C. Busse, Speech Correction, p. 280.
disorder of speech is a manifestation of a general emotional disturbance associated with certain social situations. Stammering, as such, is not inherited, and it is questionable, at least, whether it is acquired by imitations, but it does show a tendency to run in families. Stammering generally arises in early childhood, shortly before or after the age for entering school. It may come on suddenly following a severe shock or some frightful or embarrassing experience; or it may develop gradually under some milder, but continuating, social condition to which the child reacts unfavorably. In some cases stuttering seems to be a manifestation of a definite inferiority complex. In other cases it appears to be a form of hysteria. Some writers claim that a great deal of stuttering is due to forcing a naturally left-handed child to use the right hand—stutterers are frequently high strung, emotionally unstable.\(^1\)

"The young child is susceptible to speech disturbance because his conditioned reflex of speech is immature and not yet firmly fixed. This immaturity renders the child liable to inhibitions as a result of shock or illness. When shock is severe, inhibition may be total, and the child becomes temporarily mute. When inhibition is partial, either during its onset or during the period of recovery, it impedes the conditioned reflex of speech.

\(^1\)W. A. Cable, *A Program of Speech Education in a Democracy*, p. 412.
This impediment substitutes for stammering.

"Unfortunately, stammering often continues, and sooner or later the child enters upon the secondary stage of stammering which is vastly different from the primary or basic stammering. Secondary stammering consists principally in associative inhibition, or so-called conditioned inhibition, which results from negative conditioning to words, letters, persons, and situations. Conditioning also leads to associated emotional response. Inhibition of delay results from stammering and causes further stammering. Conspicuous symptoms result from the speaker's attempt to escape his predicament. In such attempts the stammerer resorts to abnormal respiration, uses unwonted physical effort in speech, employs starters and wedges, and resorts freely to the use of synonyms. Confusion may result from an unsuccessful search for synonyms."

"A stammerer is one who is suffering from a speech fear. The immediate cause for stumbling speech in a child with a predisposition to stammer may be any of the following or others: a shock, fright, injury, conscious or unconscious imitation, language conflict, desire for attention, weakness following disease, demand in school for rapid response, wrong speech training, or a change of handedness, can cause stammering. With the possible exception of the last, if great care is taken not to bring his halting speech into his consciousness, the condition will probably be transitory."

"Stammering is a nervous trouble. It varies in intensity from a slight tendency to 'stick' for a moment on certain letters and words, to a convulsive inability to speak which affects the whole body. The actual beginning of the trouble is very difficult to determine. Almost all children hesitate breathlessly when they are excited...The precise moment at which the child becomes conscious of this difficulty and feels that there is some sound which he cannot make, is the onset of true stammering."¹

"Anything that augments psychic conflicts and irritability enlarges the basis of stammering, and consequently, the intensity and frequency of the paroxysms. Everything that causes dread, haste, and eagerness has the same effect."²

"The stutterer, as do most other types of speech defectives, represents a certain lack of maturation of the central nervous system which results either in malintegration of the highest neurophysiological levels involved in speech or the predisposition of these levels to disintegration when exposed to stimuli.

"The symptoms of stuttering consist mainly of various inconsistencies in the progress of speech......The primary causes of stuttering are: 1. lack of an inherent bias for the development of a sufficiently dominant gradient

¹Elsie Fogarty, Speech Craft, p. 9.
²Alfred Appelt, Stammering and its Permanent Cure, p. 110.
of excitation in the central nervous system to integrate the movements of the organism in the production of normal speech; 2. environmental interference with the development of a sufficiently dominant gradient of excitation in the central nervous system to integrate the movements of the organism in the production of normal speech; 3. brain injuries at the subsequent or of birth; 4. physical and mental diseases.

"Accessory causes of stuttering include: 1. prolonged emotional excitement; 2. exhaustion; 3. emotional shock; 4. fear; 5. excessive timidity; 6. hypersensitivity; 7. feelings of inferiority; 8. self-consciousness; 9. anxiety.

"Stuttering may be best envisaged as a manifestation of a relative reduction in cortical control. This reduction results in an absence of a dominant gradient of excitation in the central nervous system of sufficient potency and complexity to integrate the complex mechanism of speech.

"Genetically speaking, the basic aim in the management of stuttering would be to establish and maintain a central speech dominance in the central nervous system. The management of stutterers may be considered under five large heads as follows: 1. physical hygiene; 2. mental hygiene; 3. unification of motor leads; 4. writing and speaking exercises; and 5. general speech exercises."

\[L. B. Travis, \textit{Speech Pathology}, pp. 254-256.\]
"Stuttering is characterized by sudden and frequent spasms, tonic and clonic, (usually limited to the neuro-muscular mechanism of speech, but sometimes spreading to other somatic nervous and muscular systems) during which the flow of speech is interrupted, and in the intervals between which the speech, though fluent, may exhibit vocal tenseness and even, in some cases, articulatory clumsiness. There are many varying pictures of stuttering spasms: blocking in the explosive phase of the sounds 'b,' 'p,' 'd,' 't,' 'g,' and 'k'; repetition of these sounds causes the holding of fricative sounds such as 's,' and 'r'; the laryngeal blocking on voiced continuants; the inspiratory gasps that interrupt the expiratory movements of speech. Sometimes the chief focus of the spasms disturbing speech seems to be the musculature of the face and lips, sometimes that of the tongue, again that of the larynx, or yet again that of the respiratory machinery. Acoustically, the stuttering may appear to be even a mere hesitation in the onward flow of speech."

"Stuttering is generally closely related to the preceptual processes and motor activities. The child tends to respond positively and immediately to incoming stimuli. His choice reactions are less discriminating than those of adults....In speaking we find that the motor speech mechanism often cannot keep pace with the thinking or with the eye movements....Shallow breathing, incorrect posture, laryngeal,

1R. W. West, Disorders of Speech and Voice, p. 91.
respiratory or diaphragmatic cramps, or a combination of these, are apparent in many stutterers."

"Stammering, the apparent inability to pronounce a sound, because of laryngeal cramp, lip cramp, or some other source of tension, is a common speech problem....The stammerer usually suffers from emotional strain. This may be the result of his reaction to a bad illness or fright. It may also be caused by a feeling of insecurity due to a condition at home or in school. If the cause of the emotional strain can be discovered and removed, the stammerer may be cured without a single speech exercise."2

"By stammering we understand the absence or the defective pronunciation of single sounds, or the substitution of one sound for another. Stammering and stuttering may occasionally appear together in a patient, but we must at once stress the fact that these are two different defects of speech. Stuttering almost always conditions a retarding of speech, while stammering does not, in general, influence the temporal course of speech...."3

1S. A. Stinchfield, Speech Pathology with Methods in Speech Correction, p. 99.


3J. H. Froeschel, Speech Therapy, p. 123.
LEsson Plan

lesson subject: The careful analysis of the stammerer.
Assignment for this lesson: The teacher must read carefully every book available on stammering and try to keep the child unaware of the fact that he is being treated for his stammering.

Specific objectives: 1. To give the child full confidence in himself.
   2. A habit of talking slowly and carefully.
   3. A skill in keeping calm and never becoming agitated.

procedure: Put the pupil at his ease. Relieve all tension. Try to imbue the child with a belief in himself. Talk simply to him and try to find a common interest so he will feel you are talking and sympathizing with him.

After a distinct bond is formed between the teacher and pupil, give him the lesson plans on breaking up body tension and flexibility of tongue and lips (lesson plans, pp. 30; 31)

LEsson Plan

lesson subject: The stammerer enters into the game of speech correction.
Assignment for this lesson: The singing of the vowels.
Specific objectives: 1. To give the child full confidence in himself.
   2. A habit of talking slowly and carefully.
   3. A skill in keeping calm and remaining free from agitation.

Procedure: Review relaxation and breathing. Have the child stand, feet slightly apart, and raise the arms sideways to the shoulder level, breathing in steadily through the nose. Release the air as the arms slowly descend. Repeat this movement four times. Relax the whole body.

Place the hands on the lower ribs, fingers in. Take a slow breath, feeling the diaphragm expand. Breathe out quickly, letting the chest fall. Repeat several times, each time trying to take more air and make the diaphragm larger.

Breathe as in exercise two, but let the breath come out very slowly; repeat, trying to make the breath last longer and longer.

Raise the arms slowly to shoulder level, inhaling slowly. Turn the palms of the hands upward while holding the breath. Breathe out slowly while the arms come down, palms outward.

Breathe in slowly. Sing the vowel "a" ("ei") while the breath is coming out. Repeat again, starting very low, increasing the volume.
Breathe in slowly; sing "a" on middle "o," slide to high "o." Keep repeating this until the octave is easily reached. Sing all the vowels.

Cautions: Remember, never get tired and tense.

If the throat muscles feel tense, relax completely.

LESSON PLAN

Lesson subject: Ease in speech.

Assignment for this lesson: Introduction to the sounds of speech.

Specific objectives: 1. To give the child full confidence in himself.

2. Habit of talking slowly and carefully.

3. A skill in keeping calm and refraining from agitation.

Procedure: Review relaxation and breathing, singing a vowel or two. After the child can successfully sing his vowels, let him sing "a," bringing his lips together for "m." Do this on a deep breath: ("a"..............."m".............).

Go from "a" through the vowels, always bringing them down to "m." Repeat this slowly and carefully with the voiced consonants. After he has mastered "a"............"m"........,

let him go into the singing of the other voiced consonants, such as "n," "m," "l," "v," "th," "z," "r," "zd."
After he has conquered these, introduce the voiceless equivalents to some of these consonants. This is more difficult to achieve, and should be practiced slowly and carefully. "a"......"f"......"th,"etc.

The stops, which are the stammerer's chief difficulty will be harder to manage and will have to be worked out carefully. By this time the pupil has completely mastered the singing vowel. Have him sing"a" and at the end of the breath bring the lips together for the "m," but instead of "m," push the breath out in "b." The contact of the lips should be very slight and the pupil should think that he is doing nothing new. At first the consonants may be indistinct, but do not try to hurry the stammerer into the correct manner of pronouncing the stops. After "b" has been mastered, go to "d," "g," "n," "t," "k."

Remember that a stammerer never stammers while singing, and constantly remind him to sing the vowels as daily practise. Do not give too much drill and routine that will slow down your results.

LESSON PLAN

Lesson subject: Ease in speech for the stammerer.

Assignment for this lesson: Segregation of the sounds the stammerer either stops or stutters on.

Specific objectives: 1. To give the child full confidence in himself.

2. A habit of talking slowly and carefully.
3. A skill in keeping calm and refraining from agitation.

Procedure: Should the singing method of speech correction for the stammerer be undesirable for any reason, use the first two lesson plans on relaxing and breathing. During this time the teacher has segregated the sounds which offer the most difficulty. In most stammerers the sounds will be the stops in the consonants. Start with the sounds that he generally makes right, working through phonetics, leaving the sounds in error until the last. Never push the stammerer. Do not push him through an intensive drill in phonetics or sounds, as that will only aggravate the stammering rather than correct it.

Say the following smoothly and freely:

oh............oh............oh
no.............no.............no
lo...........lo.............lo

After these are thoroughly mastered, practice:

low know only oh own
lone known knoll me lonely

Now make these phrases:

oh no, oh no, oh no.
low knoll.
low and lonely.
only and lonely knoll.
alone and lonely.

Practise all these slowly and carefully:

aw law maw maw; ah dah tah; aye ie;
ese; ha va hoo woo; ra ja ja re ri;
thu vu fu vow fow; shoo shoo cha choor;
uu fu du tu ju mu.

Practice until you get most of the work combinations.
Remember to introduce only one correct sound daily, or until it is mastered. Never give two conflicting sounds to a child to do at the same time. Remember the importance of review.
PHONETIC SYMBOLS AND SOUNDS

Twelve Lip Sounds

\[ \text{\textbf{M}} \quad (\text{what}) \quad \text{lips rounded} \]
\[ \text{\textbf{W}} \quad (\text{way}) \quad \text{lips rounded} \]
\[ \text{\textbf{U}} \quad (\text{too}) \quad \text{lips rounded} \]
\[ \text{\textbf{P}} \quad (\text{pull}) \quad \text{lips plosive} \]
\[ \text{\textbf{B}} \quad (\text{back}) \quad \text{lips plosive} \]
\[ \text{\textbf{M}} \quad (\text{many}) \quad \text{lips nasal} \]
\[ \text{\textbf{V}} \quad (\text{would}) \quad \text{lip rounded vowel} \]
\[ \text{\textbf{O}} \quad (\text{hotel}) \quad \text{lip rounded vowel} \]
\[ \text{\textbf{C}} \quad (\text{corn}) \quad \text{lip rounded vowel} \]
\[ \text{\textbf{O}} \quad (\text{on}) \quad \text{lip rounded vowel} \]
\[ \text{\textbf{F}} \quad (\text{full}) \quad \text{lip teeth} \]
\[ \text{\textbf{F}} \quad (\text{vain}) \quad \text{lip teeth} \]

Eleven Tongue Tip Sounds

\[ \text{\textbf{θ}} \quad (\text{thin}) \quad \text{tongue teeth} \]
\[ \text{\textbf{θ}} \quad (\text{then}) \quad \text{tongue teeth} \]
\[ \text{\textbf{θ}} \quad (\text{bake}) \quad \text{point of tongue, teeth ridge plosive} \]
\[ \text{\textbf{θ}} \quad (\text{dent}) \quad \text{point of tongue, teeth ridge plosive} \]
\[ \text{\textbf{θ}} \quad (\text{now}) \quad \text{point of tongue, teeth ridge nasal} \]
\[ \text{\textbf{θ}} \quad (\text{like}) \quad \text{point of tongue, teeth ridge lateral} \]
\[ \text{\textbf{θ}} \quad (\text{roll}) \quad \text{rolled side of tongue, teeth} \]
\[ \text{\textbf{θ}} \quad (\text{sit}) \quad \text{blade of tongue teeth ridge} \]
\[ \text{\textbf{θ}} \quad (\text{zone}) \quad \text{blade of tongue teeth ridge} \]
(shoe) blade of tongue teeth ridge
(pleasure) blade of tongue teeth ridge

Four Back Tongue and Soft Palace Sounds

(king) back plosive
(go) back plosive
(bring) back nasal
(father) unrounded back vowel

Seven Front Vowels (including i)

(i) (hi)
(l) (will)
(c) (take)
(e) (Hi's)
(a) (hat)
(a) (past)
(yj) (you)

Three Middle Vowels

(ə) (the)
(ʌ) (lunch)

Ten Diphthongs

ei (bay)
aɪ (buy)
iɪ (boy)
iə (beer)
εə  (bear)
υə  (boor)
οə  (bore)
ʌv  (bough)
ʌv  (beau)
ʃv  (beauty)
CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

As this study has been made from data collected from the affiliated high schools of Denton County, the following conclusions have been made for that County only. The recommendations, however, have been made for all high school systems that have not already complied with the suggestions here-in offered.

Conclusions

1. If correct speech is accepted as one of the objectives of modern education, there is a definite need for speech correction in the affiliated high schools of Denton County.

2. The interest in speech correction manifested by the secondary school administrators of Denton County is not large enough to allow a definite, county-wide speech-correction program. This might be due to insufficient knowledge of speech correction on the part of the administrators; or it might be due to the fact that the ideals of such a program are seldom achieved in the time allowed by one school year.

3. The homeroom teachers in the affiliated high schools of Denton County do not give special attention to pupils who have speech difficulties and defects for the following reasons:

(a) They do not have time because of other school
duties;

(b) They do not have sufficient interest in the children who have speech errors;

(c) They do not have sufficient knowledge of remedial work necessary for speech correction; and

(d) They do not have the patience required for the administering of corrective drills.

**Recommendations**

1. All high school teachers should be required to have at least six semester-hours in speech. This amount of work should include three semester-hours of fundamentals -- voice placement, diction, and phonetics -- and three semester-hours of speech correction.

2. Each secondary school should have a full-time speech teacher. The teaching load of this teacher should be light enough to allow her to conduct a speech clinic and to take care of all remedial work during the school day.

3. A campaign should be promoted by speech teachers, and by those teachers who know and understand speech difficulties, to make school boards, superintendents, principals, class-room teachers, and Parent-Teacher Associations speech-conscious and to make them familiar with the modern speech program.
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