The faculty handbook for clinical speech services includes information on the requirements of the Department of Public Instruction (Madison) related to clinical speech services; the philosophy, concept, and program in the Merrill Area Public Schools; speech evaluation criteria and procedures; and teacher participation in therapy procedures. Addenda include an outline of the speech and language processes and descriptions (with sample case histories) of six types of speech disorders (such as lisping and stuttering). (LS)
Merrill Area Public Schools

FACULTY HANDBOOK

FOR

CLINICAL SPEECH SERVICES
# FACULTY HANDBOOK FOR CLINICAL SPEECH SERVICES

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>II. Philosophy -- Division For Handicapped Children, Madison</td>
<td>1</td>
</tr>
<tr>
<td>III. Philosophy -- Merrill Area Public Schools</td>
<td>2</td>
</tr>
<tr>
<td>IV. Merrill Area Public Schools Concept and Program</td>
<td>3</td>
</tr>
<tr>
<td>V. The Evaluation Process</td>
<td>4</td>
</tr>
<tr>
<td>VI. Teacher Participation in Therapy Procedures</td>
<td>7</td>
</tr>
<tr>
<td>VII. Addenda</td>
<td>8</td>
</tr>
<tr>
<td>A. Neurology and Physiology of Speech</td>
<td>8</td>
</tr>
<tr>
<td>B. The Processes of Speech and Language</td>
<td>8</td>
</tr>
<tr>
<td>C. What Are The Speech Disorders? (Case Histories)</td>
<td>10</td>
</tr>
</tbody>
</table>
"...talking to themselves unceasingly, men spin without end a net of words by which their thoughts, indeed their destinies, are stayed."

---Wendell Johnson

I

INTRODUCTION

Speech is by far the most complex activity in which people engage. It can be likened to driving a car, typing a letter, playing a piano and playing a one-man band all at the same time!

Because it is so complex, it is not surprising that trouble sometimes develops. In almost any given population, a certain number will have speech disorders. Estimates of speech disorders in a typical K-12 school population average around 5%. This would mean that in Merrill, with a school population of 4,000, we could expect that about 200 pupils would have speech disorders. Fortunately, because we have had a relatively effective clinical speech program since 1965, the number of actual cases varies somewhere between 50 and 100 significant problems.

II

PHILOSOPHY -- DIVISION FOR HANDICAPPED CHILDREN, MADISON

Several important requirements of the Department of Public Instruction, Madison, relate to all clinical speech programs in the state. They are:

(1) Each child in a clinical speech program must have a communication handicap, not just a minor deviation.

(2) Each child must receive adequate services, not just token attention.

(3) The speech clinician makes the final judgements as to which pupil is included in the clinical speech program.
Implications of the above requirements are:

(a) A significant number of children believed to be in need of help are likely to mature out of their speech deviations, especially before the age of eight.

(b) The speech clinician sets his own caseload based on need. Wisconsin sets no maximum or minimum caseload.

(c) Some children need help daily, some less frequently.

(d) If a pupil cannot be considered to have a handicap by his teacher, his parents or above all, the clinician, he cannot be enrolled in the program.

(e) Simple remedial procedures can be carried out by the teacher, teacher aide, or parent, under the direction of the clinician.

(f) The speech clinician makes the decision as to when clinical speech services should be terminated.

III

PHILOSOPHY -- MERRILL AREA PUBLIC SCHOOLS

The Staff Handbook for Merrill Area Public Schools states, "We believe that Merrill Area Public Schools should provide the best possible education commensurate with our resources so that each student will have an equal opportunity to achieve his maximum potential as a member of our democratic society." (p. 2) This goal provides one basis for the clinical speech program, inasmuch as a speech disorder is often a real detriment to achieving "maximum potential."
The Merrill Area Public Schools has operated a successful Clinical Speech Program using the concept that prevention of speech handicaps and speech remediation is a team effort. The responsibility for action rests principally on the clinician who acts as a team leader, but it is shared by the parents, teacher, and teacher aide, who accept some responsibility for initiating the referral, helping with simple remediation procedures, and reporting back as to the progress of the pupil.

The area of responsibility in the Clinical Speech Program extends to the disorders of: severe unitary and multiple articulation problems, stuttering, cleft palate speech, delayed speech, language deficit, cerebral palsy speech and hearing impairment.

Speech services are initiated by referral to the speech clinician. There is a standard form for this purpose. Referral is generally made by the classroom teacher, but can be made also by the parents, guidance counselor, psychologist, nurse, family doctor, or any adult concerned about the child.

Evaluation follows referral. Many phases of the pupil's communication processes are carefully evaluated. Occasionally further referral is made to medical, dental, hearing or psychological specialists. One report of the speech evaluation is sent to the school, one to the Director of Instruction, and a copy is kept in our permanent records.

A careful selection is made following evaluation. The pupils NOT selected are sometimes inactivated immediately as having insignificant deviations. Otherwise, the child is placed on a follow-up program to verify
whether developmental processes will correct the deviation. If not, the child is considered for therapy at a later date.

Those selected are provided services as frequently as needed. As mentioned above, often the assistance of the teacher, parent or paraprofessional is required to help provide for the needs of the pupil. Always, it is important to report to and work closely with the parents and teacher. Sometimes, the psychologist, nurse, speech and hearing clinic, medical or dental specialist, or other special service play an important role in the speech remediation process.

Termination from clinical speech is on several levels. One is a "Temporary Graduation" which is awarded if a pupil has advanced to a point of relative normalcy and shows promise of being able to continue normal speech on his own. He is followed-up and brought back into the active clinical speech program if necessary.

The other level is "Permanent Graduation," awarded when it is quite certain that the pupil's normal or improved speech has stabilized.

Reports are made to the schools and parents at the end of the school year. Reports include: problem, progress, future needs, and comments.

THE EVALUATION PROCESS

Evaluation is an essential part of the Clinical Speech Program, as it points the direction any needed therapy should take.

The classroom teacher is an important part of the evaluation process, as he or she is usually the one to make the referral.
The standard form for making the referral is available in any Merrill Area Public Schools school office.

We feel the information requested on the referral form is essential for us. Not only is necessary identification material provided, but other information allows us to judge the urgency of the case and to select the most needed evaluation procedures.

We would like to remind the classroom teacher at this point to try to make the judgment as to whether or not the pupil's problem can be considered to be a "handicap." If the child's problem cannot be considered as handicapping, he cannot be enrolled in the program and should not be referred.

The following would not be considered to be handicaps:

1. Mild lisps (unless the parents are concerned)
2. Deviations of r, l and th in grade 1 and kindergarten
3. Speech that is somewhat slow, fast, or quiet
4. Deviations of sh, ch and j, s and z in grade 1 and kindergarten.

The following would be possible handicaps and should be referred:

1. Continued difficulty with m, n, and ng, with mouth-breathing
2. Strong lisps continuing into grade 2 and above
3. Defective r continuing into grade 3 and above
4. Defective t, d, k, or g on kindergarten level or above
5. Extremely hoarse or rough voice at any grade level
6. Excessively nasal speech, at any grade level
7. Consistent stuttering behavior at any grade level
8. Consistent inability to understand and follow instruction
9. Consistent inability to express ideas and needs
10. Speech that is excessively slow, fast or quiet
11. Speech that is very hard to understand at any grade level.
In case of any doubt, a referral should be made. In this way, the clinician will make the judgment as to who should be enrolled.

Generally, these areas are investigated in clinical speech testing:

1. **Articulation.** A standard articulation procedure is used. Can the pupil pronounce all sounds normally?

2. **Comprehension of oral verbal symbols.** Is the pupil's understanding of words and sentences adequate for his age?

3. **Expressive vocabulary.** Does the pupil have an adequate ability to name items and abstractions?

4. **Syntax.** Can the pupil formulate sentences normally? Sometimes average, sentence length and use of essential words are below expectations.

5. **Oral coordination.** Do the lips, tongue, soft palate and jaw move adequately, especially in complicated coordinated movements?

6. **Dental and oral adequacy.** Are tooth alignment, palate elevation opening in nasopharynx adequate for normal speech?

7. **Attitude.** Does the pupil respond positively? Or does he react defensively?

8. **Ability.** Does the pupil have the necessary intellectual resources to make any needed progress?

9. **Responsiveness.** Does the pupil respond well in a trial therapy situation?

10. **Hearing.** Is hearing adequate for communication?
In addition to these procedures, in Merrill we have the services of the psychologist and Title I diagnostician who, if needed, administer the following helpful diagnostic tests among others:

- Peabody Picture Vocabulary Test
- Illinois Test of Psycholinguistic Abilities
- Wechsler Pre-School and Primary Scale for Children
- Wechsler Intelligence Scale for Children
- Peabody Individual Achievement Test
- Wepman Test of Auditory Discrimination

VI

TEACHER PARTICIPATION IN THERAPY PROCEDURES

Teachers are requested to do the following things while the pupil is actively participating in the Clinical Speech Program:

1. See to it that the pupil is on time.

2. Most students are given assignment slips. Ask to see the assignment and remind the student to complete it.

3. At the clinician's request, help the student strengthen certain new skills he has learned in speech therapy.

4. Report to the clinician as to progress the pupil is showing.

5. Help the clinician decide when therapy can be discontinued.

These are things that teachers can do to help any child learn to be a better speaker, but especially those with problems:

1. Speak slowly, pleasantly, clearly, and simply.

2. Use "accepting and shaping" responses. If a child says, "I thee you have a pair of new teeth," you say, "Yes! I'm glad you noticed my shoes!"
(3) Help develop a strong self-image by success experiences. Speech is learned. Learning takes place best in a person who is happy and confident.

(4) Have fun talking with the children. What they say is important to them. Be sure to let them know it is important to you.

VII

ADDENDA

A. Neurology and Physiology of Speech

We are equipped with an exceedingly well-developed brain and speech apparatus for the production of speech. Our brain is estimated to have about 10,000,000,000 (10 billion) cells in the cortex alone. Possibly at least 4 billion cortical cells are involved in the process of speech. This is required for idea formation, word retrieval, verbal expression and comprehension.

Also, our tongue, lips, soft palate, and vocal cords are much more agile and responsive than they would need to be for just eating and breath-holding. They seem to be highly developed for the specific functions of speech. (This should be very interesting from the standpoints of religion and philosophy!)

B. The Processes of Speech and Language

For any idea to be transmitted from one person to another, the following sequences must take place:

(A) The speaker must generate an idea.

(B) The idea must be transformed into a sequence of words.

(C) The sequence of words is transformed into an exceedingly
complex and combined series of movements of the lips, tongue, vocal cords, soft palate, jaw and muscles of breathing.

(D) The movements are transmitted as sound, via air, to the listener.

(E) The listener hears the sounds, which have frequencies of from 50 to 8,000 cycles-per-second.

(F) The sound-sequences are recognized as word units.

(G) The word units are assembled to form ideas. (In many cases, especially with abstract and complex ideas, the listener formulates an idea that is significantly different from that intended by the speaker.)

The processes of communication can break down at any level.
C. What Are The Speech Disorders?

In schools, these are generally the most frequently observed problems:

(A) **Lisping**. (Level C). In these cases, the tongue is improperly placed for s, z, and sometimes sh, ch, or j. A **central lisp** may occur in which the tongue comes between the teeth for any of the above sounds, causing a th-like sound: thing for sing. A lateral lisp is produced when the tongue is placed so that the air escapes from the side rather than the front. The s has a distorted, almost sh-like sound: shing for sing.

Case: Jack, a second grader was referred and was found to have a strong central lisp. He had to be taught to pronounce s and z with his tongue behind his teeth rather than between his teeth. (Careful positioning procedures are necessary for this.) When he was able to say s and s-z words well, his clinician and teacher helped him practice and use normal speech. He has now been graduated from the program, after 37 lessons.

Case: Fred, an intelligent fourth grader, was discovered to have a severe lateral lisp on s, z, sh, ch, zh, and j. He was well motivated to improve his disordered speech. He quickly learned to say the above sounds normally. Soon he was saying them in words. It took only 5 lessons to achieve a complete correction.

(B) **Other Articulatory Disorders** (Level C). It is sometimes observed that a pupil has trouble articulating l (wady for lady), r (wed for red), f (pan for fan) t (koy for toy), k (tum for come) th (ting for thing) sh (tee for she). Almost any consonant or vowel sound can be defective.
It can be asked, do not children outgrow these kinds of speech problems? Are they not simply indications of immaturity?

Answer: In certain cases, yes. We can expect that a child in kindergarten, first grade and second grade may have some articulatory disorders as a result of incomplete development of the speech systems. However, almost no "outgrowing" of articulatory disorders occurs after grade 2. (We have seen several l problems, more r problems, and many lisps on the secondary level.)

Case: Frank, an intelligent kindergarten pupil, was found to say w for f (wan for fan), s (wmn for sun), v (west for vest), sh (we for she), l (wet for let), r (wed for red), th (win for thin), ch (win for chin), and j (wack for jack). There was some chance that Frank would "outgrow" his problem. However, since nobody could understand him, it was decided to consider him as handicapped and include him in speech therapy for more rapid correction. In kindergarten, he learned to say f words correctly. As a first grader, he learned the other consonants and consonant blends. His teacher helped him practice his new skills, and, later, a teacher aide helped him practice and use these sounds during the week. As a second grader, he now has normal speech. Forty-seven lessons were needed.

(C) Stuttering. (Level C - after B and A as well), Stuttering is a fascinating and frustrating disorder, especially in the later grades and secondary levels.

It is incorrect to lump all kinds of repeated and blocked speech as stuttering. Many young children, about 3-5 years of age, do a considerable amount of repeating in the process of formulating ideas and sentences (Can-can-can- I-I go?) (Levels A and B).
Can this be called stuttering? Some specialists take this liberty, but it would seem more accurate to refer to these problems as minor difficulties associated with neurological and speech development, rather than to assign the name "stuttering", suggesting a pathology.

"Stuttering" should be reserved for the disorders of speech in which muscular tension, forcing, repetition and embarrassment play a part.

Case: James was followed from the kindergarten level to the third grade. Stuttering was becoming severe as he entered the third grade. As he spoke, he would often hold his breath and then force: "Uh-uh-uh-uh-I uh-uh-want to uh-uh-uh-drive a truck." This symptom (vocal fold adduction) is often an indication of true stuttering.

James had to be shown how to talk easily, and keep his voice-box relaxed, for reading, reciting, and conversation. He is now a fifth grader, has had 70 lessons, and is in most situations a normal speaker unless excited, when he sometimes reverts to his old habit of stuttering. He has been recently given a Temporary Graduation.

(D) Cleft-Palate Speech. (Level C). Sometimes a child is born with an incomplete division (cleft-palate) between his nose and mouth. This must be remedied by surgery, a mechanical (prosthetic) appliance, or both. Often a child, after surgery and after an appliance is fitted, needs therapy to learn to articulate words correctly.
Case: Bill was started in speech therapy as a kindergarten pupil. He had a cleft palate and lip as a baby, and had surgery which incompletely closed the opening in his palate. As a result of learning to talk with an incomplete palate and having no chance to build up pressures for the tongue-tip sounds (t-d-s-z-sh-ch-j-th), he learned to use back-tongue sounds and said: koy for toy, kee for see, gik for dish, etc.

Tongue-tip exercises helped Bill learn to place the tongue-tip correctly. Later, he was fitted with a prosthetic appliance to assist him develop the intra-oral pressures required by speech. He had had over 100 lessons in speech therapy, and is now a normal speaker, except for a trace of nasality.

(E) Dysnomia. (Level B). Pupils with this problem cannot think of the right word for things when they talk. Sometimes they hesitate with a great many -ums- as they search for the right word.

Case: Dorothy was referred as a stutterer. Closer examination showed she was dysnomic: she could not remember the name for ship, horse, fireman, etc. as she spoke. Brain damage seemed to be the cause, as Dorothy has a clumsy walking pattern; she drags her feet, is left-handed and has a severe reading disorder. She has had over 95 sessions. She can associate most pictures with their printed names, but still she has some trouble naming either the word or the picture. She follows directions well, but it appears that she will always have a residual dysnomia.
(F) **Hard of Hearing Speech.** (Levels B, C, E, F, G). A person who has had a hearing disorder for a long time is usually easy to identify. He, even after much speech work, usually omits the sounds he doesn't hear (usually s-sh-ch and says tee for see) and may speak with a strained voice. He usually is adequately oriented as to concrete items, but he is disoriented as to the more abstract meanings. He has difficulty with: associate, greed, wayward, responsible and foreign, but he can tell you all about cars, houses, people, and rabbits.

People with hearing losses need speech and lip-reading help, but in addition, they need to have their horizons broadened so as to understand abstract words that are easily understood by their peers.

**Case:** Sam entered school with an unrecognized and severe hearing loss. It was not until he was well into his kindergarten year that his loss was recognized; he was previously considered as having an emotional problem! His loss was almost in the deaf range.

After considerable speech and language therapy, Sam has learned to lip-read well, and has a good basic vocabulary. He needs to be more careful about his articulation, as he will tend to say rite for nice, and bitiko for bicycle.

His major difficulty is in understanding meanings of ambiguous and abstract words. If asked to take a hammer back, he may hide it behind his back. (Lack of understanding more than one meaning
In addition, he has trouble with words readily understood by his classmates, as: combination, appearance, distance, accurate; introduce. As a result he is missing much of the material, and is increasingly frustrated with academics. However, he should be able to make a good adjustment in some skilled vocation in which understanding of abstract language is unimportant.

A CONCLUDING THOUGHT

We, indeed, "stay our thoughts and our destinies" by the things we utter day after day. Speech is not only the most complex, but also probably the most important activity in which we engage.

It is essential for human relations and optimum progress in solving our problems, that people be enabled to express themselves as clearly as possible, without being encumbered by communication handicaps or fear of listener disapproval.

Thus, all of us involved in reducing or solving communication disabilities — clinician, parents, teachers, aides — share in the exciting process of improving the human situation, and we clearly are directly, or indirectly, involved in helping each other face and possibly solve problems that trouble and divide us.