

DOCUMENT RESUME

ED 244 410

EC 162 405

TITLE A Resource Manual for the Development and Evaluation of Special Programs for Exceptional Students. Volume II-C: Speech and Language Impaired. Revised.

INSTITUTION Florida State Dept. of Education, Tallahassee. Bureau of Education for Exceptional Students.

PUB DATE Jul 79

NOTE 97p.; For related documents see ED 235 643, ED 235 652, and EC 162 404-420.

PUB TYPE Legal/Legislative/Regulatory Materials (090) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC04 Plus Postage.

DESCRIPTORS Definitions; Elementary Secondary Education; Eligibility; *Language Handicaps; *Program Development; Referral; Screening Tests; *Speech Handicaps; Staff Development; State Curriculum Guides; Student Evaluation; Student Placement; Teaching Methods

IDENTIFIERS Florida

ABSTRACT

The manual outlines procedures for Florida school districts in serving students with speech and language impairments. State and federal regulations are cited at the beginning of each section with recommended best practices for their implementation in the following 15 areas: definition, eligibility criteria, screening, referral, evaluation, determinations of eligibility and placement, provision of an educational plan, dismissal or reassignment, special program organization, instructional program, supportive services, provision for housing the program, program evaluation, personnel, and staff development. Twelve appendixes include information on language and speech tests and a bibliography on services to severely and profoundly retarded students. (CL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED244410

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
This document has been reproduced as
received from the person or organization
originating it.
This report has not been processed by
ERIC.

A RESOURCE MANUAL FOR THE DEVELOPMENT AND EVALUATION OF SPECIAL PROGRAMS FOR EXCEPTIONAL STUDENTS

Volume II-C: Speech and Language Impaired



FLORIDA DEPARTMENT OF EDUCATION
Ralph D. Turlington, Commissioner
Tallahassee, Florida
Affirmative action/equal opportunity employer

REVISED JULY 1979

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Wendy Culbert

ED 16 2445

FLORIDA DEPARTMENT OF EDUCATION
DIVISION OF PUBLIC SCHOOLS
BUREAU OF EDUCATION FOR EXCEPTIONAL STUDENTS

Florida Department of Education Publications in Exceptional Student Education

The following is a list of publications developed by the Bureau of Education for Exceptional Students to assist local school systems in the provision of special programs for exceptional students. For additional information, please contact:

Mrs. Linda D. Schroeder, Consultant
EDERS Clearinghouse/Information Center
Florida Department of Education
Bureau of Education for Exceptional Students
Knott Building
Tallahassee, Florida 32301
Telephone: 904/488-1879 Suncom: 278-1879

RESOURCE MANUALS

Laws and Rules

- Volume I-B: Florida Statutes and State Board of Education Rules: - Excerpts for Programs for Exceptional Students, 1972.
- Volume I-C: Federal Laws and Regulations Pertaining to the Education of Exceptional Students - P.L. 94-142, Sec. 504, and P.L. 89-515, 1982.
- Volume I-E: Florida Statutes and State Board of Education Rules: Florida School for the Deaf and the Blind - Florida Department of Health and Rehabilitative Services, 1980.

Program Manuals

- Volume II-A: Visually Impaired
- Volume II-B: Mentally Handicapped, 1982.
- Volume II-C: Speech and Language Impaired, 1979.
- Volume II-D: Hearing Impaired: Deaf and Hard of Hearing
- Volume II-E: Emotionally Handicapped, 1981.
- Volume II-F: Specific Learning Disabilities, 1980.
- Volume II-G: Gifted, 1980.
- Volume II-H: Homebound/Hospitalized, 1980.
- Volume II-I: Physically Impaired, 1977.
- Volume II-J: Occupational and Physical Therapy, 1982.
- Volume II-K: Deaf-Blind, 1982.

Topic Manuals

- Volume III-A: Individual Educational Programs, 1980.
- Volume III-B: Evaluating the Non-English Speaking Handicapped, 1982.
- Volume III-C: Mediation and Due Process Procedures, 1982.
- Volume III-D: Maintaining Education Records of Pupils and Adult Students, 1982.
- Volume III-E: Alternative Communication Systems for Non-Vocal Students, 1982.
- Volume III-F: Electronic Communication Devices for Visually Impaired Students, 1982.
- Volume III-G: Alternative Delivery Systems for Homebound/Hospitalized Students, 1982.
- Volume III-H: Supplement User's Guide AWD ABS-PSV, 1981.
- Volume III-I: Computer Assisted Instruction and Support for the Handicapped: Interim Report, 1982.

Training Manuals

- Volume IV-A: Training Manual for School Bus Drivers Transporting the Handicapped, 1982.
- Volume IV-B: A Training Manual for Teachers of the Homebound/Hospitalized Student, 1980.

Curriculum Planning Resources

- Volume V-A: Curriculum Planning Resource Manual for Developmental Skills and Communication Skills; Hearing Impaired: - Deaf and Hard of Hearing, 1977.
- Volume V-B: MODEL: Music or Drama to Enhance Language Learning, 1982.

A RESOURCE MANUAL FOR THE DEVELOPMENT AND EVALUATION OF SPECIAL PROGRAMS FOR EXCEPTIONAL STUDENTS

Volume II-C: Speech and Language Impaired

Bureau of Education for Exceptional Students



FLORIDA DEPARTMENT OF EDUCATION
Ralph D. Turlington, Commissioner
Tallahassee, Florida
Affirmative action/equal opportunity employer

REVISED JULY 1979

Copyright
State of Florida
Department of State
1979

FORWORD

Through the provision of state funds by legislative action, the people of Florida have indicated their desire to meet the special education needs of exceptional students. The Florida Department of Education is ready to cooperate with parents, teachers, school administrators, other agencies and interested citizens in an effort to establish instructional programs for exceptional students as the local community may need.

The right of an exceptional student to a free public education must be fully implemented. This Resource Manual should assist local school systems in developing appropriate procedures to provide those special arrangements which will enable the exceptional student to make greater progress toward optimal growth and development.

It is hoped that this Resource Manual will help bring clarity and direction to educational planning for exceptional students in Florida and be broad enough in scope for the varying needs of the individual and the community.

TABLE OF CONTENTS

Introduction.....	iv
Purposes of Resource Manual.....	v
1978-79 State Steering Committee for Speech and Language Impaired.....	vi
I. Definition.....	1
II. Criteria for Eligibility.....	1
III. Procedures for Screening.....	5
IV. Procedures for Referral.....	8
V. Procedures for Evaluation.....	8
VI. Procedures for Determining Eligibility and Placement.....	14
VII. Procedures for Providing an Educational Plan.....	16
VIII. Procedures for Dismissal or Reassignment.....	19
IX. Special Program Organization.....	20
X. Instructional Program.....	24
XI. Supportive Services.....	27
XII. Procedures for Providing Housing.....	29
XIII. Program Evaluation.....	30
XIV. Personnel.....	33
XV. Staff Development.....	35
Selected Readings.....	38
Appendix.....	42
A. Continuum of Language, Speech, and Hearing Services for Children and Youth.....	43
B. Predicted Prevalence of Language and Speech Handicapped....	44
C. Acquisition of Consonant Sounds.....	46
D. Development of Some Aspects of Oral Language, 3-8 Years....	47
E. Language and Speech Tests.....	51
F. Language Assessment Outline.....	56

G. Language Sampling, Analysis, and Training Procedures.....	67
H. Rules for Calculating Mean Length of Utterance.....	69
I. Stuttering Severity Instrument.....	70
J. Voice Profile.....	71
K. Services to Severely and Profoundly Retarded: A Bibliography..	73
L. Behavior Charting Profile.....	78

INTRODUCTION

Verbal communication is man's most unique and complex ability. Any disturbance to the natural development of language and speech (its rhythm, pitch, quality, articulation, spoken vocabulary or syntax) exposes the speaker to possible educational retardation, self-frustration and social discomfort.¹ Every student should have the right to develop maximum competence in communication, and school programs have the continuing responsibility to meet the communication needs of their students.

Many students in the school community have communicative disorders in language and speech and now constitute the largest population of school age children with handicaps. No fewer than 83,000 Florida school age children are handicapped because of a language or speech disorder. These disorders in language, peripheral and central auditory disorders, articulation, voice and fluency can create learning problems and prevent children from developing skills in listening, speaking, reading and writing.

The need for developing standards and guidelines for comprehensive services in language and speech has emerged from legislative mandates to serve exceptional students and from demands for accountability in program development, management and evaluation.

The American Speech-Language-Hearing Association recognized this need and published the first nationally derived set of standards and guidelines. As stated in the introduction to this manual, "...standards and guidelines for school language, speech, and hearing programs must be written to accommodate differing patterns of school district administration, supervision, and special program management. Since school districts differ in size and population served (for example, rural, urban, suburban, socioeconomic status, racial and ethnic variations), a variety of program models is required to accommodate the diverse needs of pupils in developing communication skills."²

¹Approved Guidelines For The Preparation of Speech Correctionists, State of Florida Department of Education, Officially approved by TEAC, March, 1971.

²Standards and Guidelines for Comprehensive Language, Speech and Hearing Programs in the Schools. American Speech-Language-Hearing Association, Washington, D.C. (1973-74).

PURPOSES OF RESOURCE MANUALS

1. To provide information regarding general considerations for development and evaluation of district programs for exceptional students.
2. To provide information specific to program development and evaluation for each area of exceptionality.
3. To serve as a vehicle for planning and communication among the exceptional student staff, school principals, parents and other education and community programs within a district.

The intent of Volume II-C is to provide Florida's school districts with recommendations and suggestions for the development, management and evaluation of programs for the speech and language impaired. This volume is organized in a format similar to the district procedures outline. The Florida State Board of Education Rules and federal regulations are stated at the beginning of most of the sections. The rules and regulations are in script type to allow the reader to easily distinguish the rules and regulations. Following the rules and regulations, in regular type, are recommended best practices and procedures for implementation of the rules and regulations and for the development of district procedures. Florida Statutes will be referred to as F.S., State Board of Education Rules as SBER, and federal regulations as CFR.

The preparation of this document could not have been completed without the contributions of many school clinicians, directors of education for exceptional students, university personnel, and concerned professionals in the field of speech pathology and audiology from around the nation. Their professional assistance is gratefully acknowledged. In addition, the 1978-79 State Steering Committee for Language, Speech, and Hearing should be recognized for its many hours of work and valuable technical assistance. The members of the committee are listed on the following page.

FLORIDA DEPARTMENT OF EDUCATION
DIVISION OF PUBLIC SCHOOLS
BUREAU OF EDUCATION FOR EXCEPTIONAL STUDENTS

STATE STEERING COMMITTEE FOR SPEECH AND LANGUAGE IMPAIRED
1978-79

Ellen DiSalvo, Contact Clinician
Language, Speech & Hearing
School Board of Gadsden
County, Florida
Quincy, Florida

Tom C. Ehren, Coordinator
Language, Speech & Hearing
School Board of Brevard
County, Florida
Rockledge, Florida

Beverly W. Flohr, Principal
Atlantic West Elementary School
School Board of Broward
County, Florida
Ft. Lauderdale, Florida

William C. Flory, Director
Speech and Hearing Center
Palm Beach Junior College
Lake Worth, Florida

Lynn B. Grady, Coordinator
Language, Speech, and Hearing
School Board of Polk County, Florida
Bartow, Florida

Richard Gregg, Principal
Parkland Exceptional Student Center
School Board of Pinellas County,
Florida
Pinellas Park, Florida

Robi Olmstead, Director
Health Related Services
Childrens Medical Services
Tallahassee, Florida

Lorey Phillips, Chairperson
Language, Speech and Hearing
School Board of Marion County,
Florida
Ocala, Florida

Linda Ramsey, Director
Exceptional Student Education
School Board of Alachua
County, Florida
Gainesville, Florida

L.L. Schendel, Chairman
Audiology & Speech Pathology
Florida State University
Tallahassee, Florida

Vicki L. Wiman, Audiologist
Exceptional Student Education
School Board of Orange
County, Florida
Orlando, Florida

Rhonda S. Work, Consultant
Speech & Language
Bureau of Education for
Exceptional Students
Department of Education
Tallahassee, Florida

I. DEFINITION

The term "exceptional student" means any child or youth who has been certified by a specialist qualified under regulations of the state board to examine students who may be unsuited for enrollment in a regular class of the public schools or is unable to be adequately educated in the public schools without the provision of special classes, instruction, facilities, or related services, or a combination thereof. The term "exceptional student" includes the following: The mentally retarded, the speech-impaired, the deaf and hard of hearing, the blind and partially sighted, the crippled and other health-impaired, the emotionally disturbed and socially maladjusted, those with specific learning disabilities, and the gifted.

(Section 228.041(19), F.S.)

Speech and language impaired - one whose basic communication system, whether verbal, gestural or vocal, evidences disorders, deviations or general developmental needs in language, speech, fluency or voice quality, which hinder one's academic learning, social adjustment, self help skills or communication skills.

(SBLR 6A-6.3012(1))

"Speech impaired" means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a child's educational performance.

(CFR 121a.5 (b)(10))

II. CRITERIA FOR ELIGIBILITY

An exceptional student shall mean any child or youth enrolled in or eligible for enrollment in the public schools of a district who requires special instruction or special education services to take full advantage of or respond to educational programs and opportunities because of a physical, mental, emotional, social or learning exceptionality as defined in rule 6A-6.3011 through 6A-6.3020, FAC. All students placed in exceptional student programs beginning July 1, 1977, who were not enrolled in such programs the prior school year shall meet the requirements established in state board of education rules for exceptional students in effect July 1, 1977. Students enrolled in a special program for exceptional students prior to July 1, 1977 and who continue in the same special program shall meet the requirements of the 1976-77 approved district procedures for special programs. This rule shall take effect July 1, 1977.

(SBER 6A-6.301)

Define operationally the criteria for the eligible student group consistent with state board rules.

(SBER 6A-6.341(2)(a))

NOTE: Each of the following categories should be consistent with the definition and stated in measurable terms. When use of standardized tests or normative data is inappropriate, documented observations and clinical judgement may be used to determine eligibility.

A student is eligible for a special program in speech and language if the student demonstrates one or more of the following impairments:

A. SPEECH - Nonmaturational articulation disorders characterized by substitutions, distortions or omissions of speech sounds.
(SBER 6A-6.3012(2)(b))

1. When developing criteria for eligibility in a program for speech disorders, consideration should be given to the student's age and sex; number, severity, and type of misarticulation; and listener reaction. Students with transitory misarticulations, usually correlated with maturational and learning periods should have low priority; however, some misarticulations may result in self-conscious reactions as a result of teacher, parent or peer response. This latter category should be given consideration when developing criteria for speech. Percentage of error in the most frequently occurring sounds may be another criteria.

The following guide based on Templin (1) and Berry and Eisenson (2) represents ages at which 90% of boys and girls can articulate sounds. Vowel sounds are produced correctly by 90% of all children by age three and consonant blends are developed between ages seven and nine.

Boys

3	4	5	6	7
p	ng	y	wh	f
b			j	l
m				r
h				ch
w				sh
d				s
n				z
k				th
t				v
g				

(1) Templin, Mildred C., Certain Language Skills in Children. Minneapolis, Minnesota: University of Minnesota Press (1957).

(2) Berry, Mildred F. and Eisenson, Jon, Speech Disorders. New York, New York: Appleton-Century-Crofts (1956).

Girls

3	4	5	6	7
p	l	j	sh	s
b	t	y	ch	z
m			r	th
w			zh	v
d			f	
n			wh	
k				
g				
h				
ng				

2. Consideration should be given to special populations within the total school population such as physically handicapped, hearing impaired, trainable mentally retarded, profoundly mentally retarded. Criteria should be developed as required.
 3. Speech difficulties related to physical disabilities (paralysis, weakness, spasticity) should be correlated to best and optimal use of structures. Criteria may be developed to determine eligibility for the use of non-vocal communication aids.
- B. LANGUAGE - *Receptive or expressive problems of processing (perception, understanding) or disorders of syntax, semantics, morphology or phonology.*
(SBER 6A-6.3012(2)(a))

1. When developing criteria for eligibility for a program for language disorders, consideration should be given to the difference in the student's language age and his potential expectancy age (E.A.) or mental age (M.A.). M.A. should be determined from test scores derived from visual or performance tasks rather than auditory or language tasks. The purpose of using M.A. is to compare speech and language developmental abilities to other developmental abilities and to quantify discrepancies. The formula for determining E.A. is:

$$E.A. = \frac{2 \times M.A. + C.A.}{3}$$

Caution: This M.A. is only for the use of determining language discrepancy. It is not a valid M.A., nor is the E.A. that is derived.

If a psychological evaluation is available, the following M.A. scores may be considered for the above use:

Performance section of the WISC-R or WISC
Leiter
Beery Visual Motor Integration (VMI)
Frostig

If no psychological evaluation is available the following may be considered:

Slosson Drawing Section
Visual Association Subtest of the Illinois Test of Psycholinguistic Abilities

Caution: The Slosson may give false positive results at the K and 1st grade levels. Consideration should be given to use of a backup test where results are in question.

2. Consideration also should be given to the student's communicative ability in relation to:
 1. Expected developmental norms
 2. Expected dialectal norms
 3. Intelligibility ratings
 4. Mean length of utterance
 5. Type and degree of error in language function
 6. Total verbal output

In addition, criteria may be developed reflecting anecdotal reports, observations and the student's self-assessment.

C. *FLUENCY - Inappropriate rate or flow of speech characterized by any of the following: repetitions, prolongations, blocks, hesitations, interjections, broken words, revisions, incomplete phrases or ancillary movements that are indicative of stress or struggle.*

(SBER 6A-6.3012(2)(c))

1. When developing criteria for eligibility in a program for fluency disorders, consideration should be given to behaviors that represent a failure to be fluent or that reflect the anticipation of failure as measured by professionally recognized severity scales, attitude scales, or adaptation and consistency scales.
2. Consideration should be given to the listener's reaction to an individual's type and severity of non-fluency and behaviors that represent a failure to be fluent or reflect an anticipation of failure.
3. Consideration should be given to the speaker's own reaction to his or her individual fluency characteristics.

D. *VOICE - Disordered frequency, intensity, intonation, respiration or resonance inappropriate to student's age and sex.*

(SBER 6A-6.3012(2)(d))

1. When developing criteria for eligibility in a program for voice disorders, consideration should be given to appropriate loudness, pitch and quality in relation to the student's age and sex as determined by clinician judgement, laryngoscopic examination or professionally recognized scales or checklists.
2. Referral to a qualified physician is of the utmost importance to determine presence or absence of pathology. When determining eligibility and developing the individual educational plan (IEP), the referral should be listed as a related service and the parent(s) should be counseled as to the importance of this referral. Referral

should be made to a laryngologist, otolaryngologist or ENT who is a specialist in this area. Placement should not be initiated until a medical report provides clearance for therapy. Medical clearance may be in the form of a statement reflecting no observable pathology or may be a statement regarding specific pathology.

III. PROCEDURES FOR SCREENING

Screening is that process by which a rapid assessment is made of a given population to obtain potential candidates who may fit a particular profile.
(SBER 6A-6.341(2)b)

A. GENERAL CONSIDERATIONS

Rapid speech and language screening may be defined as that activity which provides the professional staff with a cursory profile of the verbal expressive-receptive communicative abilities of each student tested and which identifies the greatest possible number of pupils with significant speech or language deviations from the communication norms.

CAUTION: Results from these rapid screening procedures should not be interpreted as implying that a child who failed these tests be placed on the direct clinical activity roll of the school clinician. Screening is a rapid assessment made of a given population to obtain potential candidates who fit a particular profile. Diagnostic testing is of the utmost importance when determining case selection and must follow any screening process.

Screening results should be included in the student's educational record.

B. SPEECH AND LANGUAGE CONSIDERATIONS

All kindergarten students and students who have not been enrolled previously in any school shall be screened for language, speech, fluency, and voice disorders prior to February 1. No student will be eligible for a special program on the basis of screening results alone.
(SBER 6A-6.3012(3)(a))

Students being considered for exceptional student programs, excluding gifted and homebound or hospitalized who may be screened on a referral basis, shall be screened for language, speech, fluency and voice disorders prior to staffing for eligibility.
(SBER 6A-6.3012(3)(c))

Speech and language clinicians traditionally have been given the assignment for screening programs in speech and language. Although ideally these are the individuals who should be doing this screening, other activities required of the clinicians may prohibit their total involvement in screening procedures. As an alternative, aides may be trained to screen in all areas. Other professionals such as classroom teachers, guidance counselors or school psychologists may receive inservice education regarding

normal and deviant speech and language skills and, through the use of a thorough checklist and other reporting formats, may complete the speech and language screening.

Several screening devices are available for primary age students, e.g. Florida Language Screening System (FLASC), Denver Developmental Screening Test, Kindergarten Auditory Screening Test (KAST), Preschool Language Scale, Templin-Darley Screening Test of Articulation, Van Riper-Erickson Predictive Screening Test of Articulation, Washington Speech Sound Discrimination Test. *

It is recommended that the Florida Language Screening System be administered to kindergarten and first grade students.

Speech skills can be effectively screened using short forms of tests or conversational samples of listener checklists. Consideration should be given to the use of screening measures providing predictive information on articulation development.

In developing techniques for screening language above age eight, informal items can be used from available tests and, although these would not provide a standardized procedure, they would provide an acceptable method of screening for determination of the need for further testing.

A review of the student's cumulative record may reveal behaviors that reflect difficulty related to language and communication skills. Teacher appraisal of the student may also indicate a potential problem. These avenues can serve as a "red flag" to the evaluation specialist and may be considered a form of screening prior to additional testing.

In general, if a student (K-12) has passed a screening, re-screening may not be necessary. However, primary age students (K-3) who are being considered for exceptional student education and who demonstrate maturational deviations on a screening should be re-screened to determine growth in communication skills or need for further evaluation. Unless a major change is noted in the student's communication ability, a single screening after age eight should be sufficient.

SBER 6A-6.3012(3)(c) states that screening for suspected exceptional students shall be done "prior to staffing for eligibility." This means that anywhere along the time line from the point of initial teacher referral to the actual eligibility/placement staffing may be acceptable for screening. It is not necessary for the students to be screened immediately upon referral for exceptional student education testing as some referrals may be deemed inappropriate upon closer examination.

Students being considered for language or speech programs shall be screened for hearing.

(SBER 6A-6.3012(3)(b))

* Specific information regarding tests may be found in The Mental Measurements Yearbook by Oscar K. Buros

SBER 6A-6.3013(3) states "Audiometric screening and referral shall be in accordance with standards established in the Florida Plan for School Health Services mandated by the School Health Services Act of 1974." The following statements are from the Florida Plan and from the Medicaid Early and Periodic Screening, Diagnosis and Treatment program (EPSDT) upon which a portion of the Florida plan has been based:

"A. School Health Services (SHS)
Standard for Screening and Health Appraisal

1. SHS personnel will provide or coordinate all SHS screening activities.
2. Screening will be performed at least at the level set forth in these standards.
3. Screening of kindergarten students, to meet requirements of the Early Childhood Education Program, shall take place before the end of the first month of school.
4. All eligible students will be screened for hearing problems by the audiometric method in accordance with EPSDT Standards in Grades K, 1, 2, 3, and every three to four years through Grade 12 (or chronological age equivalents), and when referred by the teacher on the basis of observation."

"B. EPSDT
Method of Screening

c) Three to 21 years of age

It is recommended that children three years of age and over be evaluated using pure-tone audiometry testing each ear at 1,000 2,000 and 4,000 Hz at 15 dB ANSI if the ambient (environmental) noise level is low enough. If the ambient noise level is not very low, testing at 25 dB is recommended. A positive response is a failure to respond to the 15 or 25 dB tone at any two frequencies for either or both ears. Some three-year-olds may require play-conditioning audiometry to determine whether or not they hear the auditory signals. After age five, testing at 500 Hz should be added and for children over age 11 testing at 6,000 and/or 8,000 Hz is also recommended to identify the higher frequency cochlear losses that occur more frequently at that age."

School districts and health departments are encouraged to develop programs cooperatively for the best available delivery system.

IV. PROCEDURES FOR REFERRAL

Referral is the process whereby a parent or guardian, school personnel or appropriate public agencies may request assessment of the abilities of a student.

(SBER 6A-6.341(2)(c))

Students referred for language, speech, fluency or voice disorders should be tested within 30 working days of the referral.

A referral system should be available to the speech and language program. Referral may be to the clinician from any individual in a student's environment or from the student himself, or referral may be to other services considered necessary for total assessment and program planning. These services should include, but not be limited to, medical examinations, otological examinations, audiological examinations, psychological testing, educational evaluations, social services or additional comprehensive speech and language assessments. Referrals should be reviewed by the principal, guidance committee or school nurse as appropriate for the student's disorder.

Referral to a specialist should be accompanied by a report containing information such as:

1. Reason for referral - A brief statement concerning what is desired of the specialist.
2. Background information - A brief statement concerning the general nature of the child's disorder, the suspected originating and perpetuating causes, and the general intervention plans being considered.
3. Request for specific information - A brief statement indicating the type of information needed for assisting in the evaluation process. A form with instructions for returning to the referral source should be provided the specialist.

An on-going process for case referral follow-up should be established with statements reflecting time frames, individuals involved and disposition of referral:

V. PROCEDURES FOR EVALUATION

The school board (shall) provide the necessary professional services for diagnosis and evaluation of exceptional students.

(Section 230.23(4)(m), F.S.)

Evaluation is the determination of a student's physical, mental, emotional, social or learning abilities, utilizing professional assessment, appraisal or diagnosis.

(SBER 6A-6.341(2)(d))

The district's evaluation procedures shall provide for the use of valid tests and evaluation materials by trained personnel, in conformance with instructions provided by the producer of the tests and evaluation materials. For children not proficient in the English language, the district's evaluation procedures shall provide for the use of the language or other mode of communication commonly used by the child.

(SBER 6A-6.331(1)(b))

The district shall provide a reevaluation of each exceptional student at least every three years, or more frequently if conditions warrant;

(SBER 6A-6.331(1)(c))

The school district shall provide the parent of an exceptional student the right to an independent educational evaluation and shall consider the results of such evaluation in any decision regarding the student. The independent educational evaluation shall be conducted by a qualified examiner as prescribed in Rule 6A-6.331(1)(a), FAC, who is not an employee of the district school board. A parent has the right to an independent educational evaluation at public expense if the parent disagrees with an evaluation obtained by the school district, provided however, the school district may initiate a due process hearing to show its evaluation is appropriate and if the final decision is that the district evaluation is appropriate, the parent still has the right to an independent educational evaluation, but not at public expense. Whenever an independent evaluation is at school board expense, the criteria under which the evaluation is obtained, including the location of the evaluation and the qualifications of the examiner, shall be the same as the criteria prescribed by state board rules for use by the school district when it initiates an evaluation.

(SBER 6A-6.331(1)(d))

Obtaining informed parental consent prior to formal, individual evaluation to determine eligibility for special programs for exceptional students.

(SBER 6A-6.331(7)(a) 2.

(a) Language and speech clinicians shall be responsible for implementing and conducting formal identification and diagnostic assessment programs for students evidencing a suspected disability in language, speech, fluency or voice.

(b) Standardized test instruments or published normative data in speech pathology shall be employed in assessment programs for students evidencing a suspected disability in language, speech, fluency or voice.

(c) Developmental and social history shall be included as part of the data base in assessment programs when determined appropriate by the speech clinician.

(d) Medical and psychological examinations shall be requested by the speech clinician when appropriate to the assessment of a suspected disability in language, speech, fluency or voice.

(SBER 6A-6.3012(4))

A. GENERAL CONSIDERATIONS

Evaluations and assessments should include, as a minimum, evaluation of speech, language, fluency, voice, hearing acuity and perception, and examination of the peripheral speech mechanism. In some cases, more emphasis may be placed on one area rather than another. Additional information such as case history (medical, developmental, family and social), physical examination results, academic history, psychological evaluation and educational evaluation should be obtained. The case history should include factors in the student's developmental history, home situation and school environment which might relate to the communication disorder.

The district should provide the clinician sufficient time and appropriate tools for the implementation of the identification program.

Provisions should be made for the use of specialized tests, materials and equipment appropriate to the evaluation process. Consideration should be given to the sociocultural and linguistic home environment in selecting, administering and interpreting tests. Evaluation instruments should not be selected which would identify a student as handicapped solely on the basis of his dialect and/or native language performance.

Student evaluation is an on-going process. Formal evaluations or re-evaluations should be conducted at least every three years or more frequently, if deemed appropriate. Diagnostic tests and procedures in language and speech assessment should be administered and results reported by describing the significant behaviors observed.

Reevaluation should measure those areas in which deficits were diagnosed originally to determine retention in the program, transfer to a different program or dismissal and follow-up. The test battery should be appropriate to the known deficits and similar to, if not the same as, the initial evaluation procedures.

It is important to remember that no student may be evaluated without written parent permission. However, Federal regulations also state, "Except for preplacement evaluation and initial placement, consent may not be required as a condition of any benefit to the parent or child" (CFR 121.504(b)(2)). Therefore, testing as part of the ongoing clinical intervention program and re-evaluation do not require parent permission. Notice is required prior to reevaluation which must be done every three years, or more frequently if conditions warrant.

B. SPEECH AND LANGUAGE CONSIDERATIONS

NOTE: Specific information regarding the tests listed in this section may be found in The Mental Measurements Yearbook by Oscar K. Buros.

1. Speech

Speech skills should be assessed in at least two contexts such as isolation, words, sentence or conversation along with a measure of stimulability of error sounds.

Consideration should be given to assessing speech skills in a manner suitable for planning and implementing a clinical program.

Tests may include, but are not limited to, the following:

Bryngelson-Glasphy Test of Articulation
Compton-Hutton Phonological Assessment
Fisher-Logemann Test of Articulation Competency
Goldman-Fristoe Test of Articulation
Henja Articulation Test
McDonald Screening Deep Test of Articulation
Photo Articulation Test (PAT)
Predictive Screening Test of Articulation
Shelton 30-Item Deep Test of Articulation
Templin-Darley Tests of Articulation

2. Language

When testing to determine language deficit areas, consideration should be given to all aspects of language: syntax, semantics, morphology, phonology and pragmatics. These should be tested in both receptive and expressive areas. Auditory processing (awareness, memory, sequencing, discrimination, figure-ground) should be tested in relation to the language disorder. A back-up test should be given in each deficit area to determine the validity of the disorder.

Tests may include, but are not limited to, the following:

a. Receptive

Ammons Full Range Picture Vocabulary Test
Assessment of Children Language Comprehension (ACLIC)
Boehm Test of Basic Concepts

Carrow Test of Auditory Comprehension of Language (TACL)
Michigan Picture Language Inventory
Miller-Yoder Test of Grammatical Comprehension (M-Y)
Peabody Picture Vocabulary Test (PPVT)
Vocabulary Comprehension Scale

b. Expressive

Carrow Elicited Language Inventory (CELI)
Developmental Analysis of Grammatical Error Types
Developmental Sentence Types/Scoring (DSS)
Language Sampling, Analysis and Training
Michigan Picture Language Inventory
Oral Language Sentence Imitation Diagnostic Inventory
Structured Photographic Language Test

c. Receptive and Expressive

Detroit Test of Learning Aptitude (DTLA)
Houston Test of Language Development
Illinois Test of Psycholinguistic Abilities (ITPA)
Northwestern Syntax Screening Test (NSST)
Porch Index of Communicative Ability in Children (PICAC)
Sequenced Inventory of Communication Development (SICD)
Test of Language Development (TOLD)
Utah Test of Language Development (UTLD)
Zimmerman Preschool Language Scale

d. Auditory Processing

Auditory Integrative Abilities Test (AIAT)
Houston University Speech Sound Discrimination Picture Test
Differentiation of Auditory Perceptual Skills (DAPS)
Goldman-Fristoe-Woodcock Auditory Skills Battery
Goldman-Fristoe-Woodcock Test of Auditory Discrimination
Kindergarten Auditory Screening Test (KAST)
Lindamood Auditory Conceptualization Test (LAC)
Test of Non-Verbal Discrimination (TENVAD)
Tree/Bee Test of Auditory Discrimination
Visco Tests of Auditory Perception
Washington Speech Sound Discrimination Test
Wepman Test of Auditory Discrimination

3. Fluency

Consideration should be given to the use of objective measures of fluent and non-fluent behaviors, attitude rating scales and anecdotal records from the student, parent and teacher. A complete record of pre- and post-therapy behaviors, their type and extent, is essential to making effective clinical decisions.

Evaluation procedures should be chosen which either reflect a particular clinical methodology or provide information for the development of an individual educational plan.

Fluent and non-fluent behaviors measured include, but are not limited to, the following:

- a. Number and percentage of stuttering episodes such as: repetitions of sounds, words, phrases; prolongations, hesitations and blocks; interjections; and revisions
- b. Speaking rate per minute for syllables or words.
- c. Secondary behaviors related to fluency maintenance or non-fluency such as: eye blinks, head jerks, arm swings, lip puckers.
- d. Antecedent or concomitant physiological changes in generalized or local body parts, such as: palm sweat, muscle tension, galvanic skin response, brain waves.
- e. Anticipated or actual attitudes, emotions, or behaviors associated with non-fluent behavior.

Fluency is assessed in some of the following communication situations:

- a. Rote counting or other common sequential items, phrases, etc.
- b. Imitation of progressively more complex communication tasks.
- c. Naming pictures.
- d. Answering questions.
- e. Oral reading.
- f. Conversation with clinician, parents, friends, strangers in varying settings.

Resources for evaluation techniques and measures may be found in:

- a. Brutton and Schoemaker, Stuttering in Children.
- b. Cooper, Personalized Fluency Control.
- c. Fairbanks, Voice and Articulation Drillbook.
- d. Johnson, Darley and Spriestersbach, Diagnostic and Clinical Methods Workbook.
- e. Luper and Mulder, Stuttering: Therapy for Children.
- f. Mowrer, Charting and Applied Consequences.
- g. Ryan, Programmed Therapy.
- h. Van Riper, The Treatment of Stuttering.

4. Voice

The quality of the voice and the structure and function of the mechanism must be evaluated in detail before a program can be appropriately developed. The clinician is trained to measure intensity, intonation, respiration, resonance, duration, range, and rate of vocal production. The laryngologist is trained to examine the physical condition of the ears, nose, sinuses,

larynx and vocal folds and to determine the existence or absence of pathology. Referral to a qualified physician, i.e. laryngologist, otolaryngologist, or ENT, is important to the evaluation and case management of a student with a suspected voice disorder.

Resources for evaluation techniques and measures may be found in:

- a. Boone, The Voice and Voice Therapy.
- b. Brodnitz, Vocal Rehabilitation.
- c. Fairbanks, Voice and Articulation Drillbook.
- d. Greene, Voice and its Disorders.
- e. Johnson, Darley, and Spriestersbach, Diagnostics and Clinical Methods Workbook.
- f. Moore, Organic Voice Disorders.
- g. Wilson, Voice Disorders Kit.
- h. Wilson, Voice Problems of Children.

VI. PROCEDURES FOR DETERMINING ELIGIBILITY AND PLACEMENT

No student shall be given special instruction or services as an exceptional student until after he has been properly evaluated, classified, and placed in the manner prescribed by rules of the state board. The parent or guardian of an exceptional student evaluated, placed, or denied placement in a program of special education shall be notified of each such evaluation, placement, or denial. Such notice shall contain a statement informing the parent or guardian that he is entitled to a due process hearing on the identification, evaluation, placement, or lack thereof...

(Section 230.23(4)(m)4, F.S.)

Determining eligibility is the professional activity of reviewing evaluation information and matching it to the operational definition....

Placement is the professional determination of an eligible student's educational assignment based upon the student's assessed needs and consideration of program alternatives....

(SBER 6A-6.341(2)(e))

A staffing committee utilizing the process of reviewing diagnostic, evaluation, educational or social data shall recommend student eligibility for special programs and shall recommend the student's educational placement.

A minimum of three (3) professional personnel, one (1) of whom shall be the district administrator of exceptional students or designee, shall meet as an eligibility and placement staffing committee. Additional personnel may be involved in the eligibility and placement recommendation by providing information or by attending staffing meetings....

(SBER 6A-6.331(2))

The language and speech clinician shall have the primary responsibility for recommending placement in special programs for the language and speech impaired. An eligibility staffing committee composed of the language and speech clinician and at least two (2) other professional personnel shall review the assessment data to recommend eligibility for the program.

(SBER 6A-6.3012(5))

In providing for the education of exceptional students the superintendent, principals, and teachers shall utilize the regular school facilities and adapt them to the needs of exceptional students whenever this is possible. No student shall be segregated and taught apart from normal students until a careful study of the student's case has been made and evidence obtained which indicates that segregation would be for the student's benefit or is necessary because of difficulties involved in teaching the student in a regular class.

(Section 230.23(4)(m)5, F.S.)

There are two types of staffings, one for determining eligibility and one for determining placement. In conjunction with determining placement, there may be a further meeting to develop an individual educational plan. In most cases, these three processes may be combined into one meeting. Experience has shown that the combining of all three processes is the most efficient and effective means of placing students in the program.

If all three activities are combined in one meeting, the following individuals must be in attendance: the speech-language clinician, the district administrator of exceptional student education or designee, the LEA representative, the child's teacher and the parent. Additional committee members may include, but not be limited to, the child, guidance counselor, psychologist, audiologist, speech pathologist/diagnostician, nurse and other individuals at the discretion of the parent. These individuals may be graphically represented as follows:

Eligibility/Placement

District administrator or designee
Speech-language clinician
One other professional

IEP

LEA representative
Child's teacher
Parent

The district administrator may serve as the LEA representative.
The speech-language clinician may serve as the child's teacher.

Thus, to meet the requirements of both eligibility/placement and IEP meetings, the committee could be composed of the following:

District administrator as LEA representative
Speech-language clinician as child's teacher
Parent
One other professional, e.g. classroom teacher,
guidance counselor, diagnostician, or psychologist.

The placement decision shall be based on the written criteria and established procedures for determining eligibility. This decision shall be based on diagnostic reports describing the student's specific behaviors, defining the problem and providing for the formulation of goals and objectives.

Priorities for weekly time in the speech and language program shall be based on type and severity of disorder with consideration given to the severely or multiply handicapped student. Time in program shall be determined through the development of program goals and objectives.

Careful consideration should be given to students who transfer from programs in other districts or other states. Records should be reviewed and additional evaluations should be conducted if deemed necessary. A staffing should be held and all procedures should be followed to ensure that the student meets criteria for eligibility and that an appropriate placement is determined.

It is important to remember that no student may be placed in a speech-language program without written parent permission. This permission is valid, however, until a change in placement is initiated or the parent withdraws consent.

VII. PROCEDURES FOR PROVIDING AN EDUCATIONAL PLAN

(3) Each district shall develop an individual educational plan for each exceptional student.

(a) An individual educational plan consists of written statements including:

1. A statement of the student's present levels of educational performance;
2. A statement of annual goals, including short term instructional objectives;
3. A statement of the specific special education and related services to be provided to the student and the extent to which the student will be able to participate in regular educational programs;
4. The projected dates for initiation of services and the anticipated duration of the services; and
5. Appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether the short term instructional objectives are being achieved.

(b) An individual educational plan which has been reviewed and revised, if appropriate, within the past year, must be in effect at the beginning of each school year for each exceptional student continuing in a special program. For new exceptional students assigned to a special program, an individual educational plan must be developed in conjunction with the assignment to a special program.

(c) Meetings shall be held to develop, review and revise an exceptional student's individual educational plan.

1. A meeting shall be held at least once a year to review each exceptional student's individual educational plan and, as appropriate, revise its provisions.

2. Meetings shall include the following participants:

a. A representative of the district school system, other than the student's teacher, who is qualified to provide or supervise the provision of special education.

b. The student's teacher.

as provided in Rule 6A-6.331(7).

- d. The student, when appropriate.
- e. Other individuals at the discretion of the parent or district school system.

f. In addition, for an exceptional student who has been evaluated for the first time, a member of the evaluation team or some other person who is knowledgeable about the evaluation procedures used with the student and is familiar with the results of the evaluation.

3. If through a contractual arrangement with a non-public school, meetings are initiated and conducted by the non-public school, the district school system representative and the parents shall be involved in decisions about the individual educational plan and shall agree to proposed changes in the plan prior to those changes being implemented.

4. If an exceptional student is enrolled in a non-public school and receives special education from a school district, the school district shall:

a. Initiate and conduct meetings to develop, review and revise an individualized educational plan for the student, in accordance with Rule 6A-6.331(3); and

b. Ensure that a representative of the non-public school attends each meeting. If the representative cannot attend, the school district shall use other methods to ensure participation by the non-public school, including individual or conference telephone calls.

(SBER 6A-6.331)

4. Parental participation in the development of the individual educational plan for the student.

a. Each district shall take steps to ensure that one (1) or both of the parents of an exceptional student is present at each meeting or is afforded the opportunity to participate, including:

[1] Notifying parents of the meeting early enough to ensure that they will have an opportunity to attend; and

[2] Scheduling the meeting at a mutually agreed on time and place.

b. The notice to the parent must indicate the purpose, time, and location of the meeting and who will be in attendance.

c. If neither parent can attend, the district shall use other methods to ensure parent participation, including individual or conference telephone calls.

d. A meeting may be conducted without a parent in attendance if the district is unable to obtain the attendance of the parents. In this case, the district must have a record of its attempts to arrange a mutually agreed on time and place such as:

[1] Detailed records of telephone calls made or attempted and the results of those calls;

[2] Copies of correspondence sent to the parents and any responses received; and

[3] Detailed records of visits made to the parent's home or place of employment and the results of those visits.

e. The district shall take whatever action is necessary to ensure that the parent understands the proceedings at a meeting, including arranging for an interpreter for parents who are deaf or whose native language is other than English.

f. The district shall give the parent, on request, a copy of the individualized educational plan.

(SBER 6A-6.331(7)(a))

Procedures for providing an individual education plan. Describe procedures and personnel responsible for developing, reviewing and revising individual educational plans as required by Rule 6A-6.331(3). EAC

It is recommended that the complete individual educational plan (IEP) be written at the time of the eligibility/placement staffing.

Public Law 94-142 specifies that the IEP consist of the components listed above. These components are similar to a teacher's assessment and plan of a student's educational needs, but formalize the cooperation of all parties concerned with the child's welfare.

The chairperson should see that the names of the committee members and their positions are recorded. The only members specified in the Federal regulations are the LEA representative (other than the student's teacher) and the teacher (special or regular). The parents must be given the opportunity to attend the meeting, but it may be held without them. In addition, other members of the school district and the student should participate in the process when needed. Membership of the committee may vary depending on the case.

Present level of functioning which includes such areas as academic achievement, social adaptation, prevocational and vocational skills should be noted on the form. Other areas of special concern should be included where appropriate (e.g. adaptive P.E., physical therapy). Each person involved with the student should have a chance to offer input to determine the full capabilities of the child.

Present level of performance should include strengths and weaknesses, learning styles, and other information that adds to the understanding of the student's status. This pertains not only to speech and language, but also to the student's overall status. This information may be obtained from psychological and medical reports, developmental, social and educational histories, speech and language evaluations, interviews with relevant persons, etc.

Assessment is a continuous process and should lead to specific statements about educational performance. These statements will serve as the basis for developing annual goals.

The next step in development of an IEP is the setting of annual (long-range) goals for the student. Goals encompass many specific objectives. The statement of goals for a student's program gives focus to learning activities, makes teacher preparation more relevant, and facilitates communication with parents about the student's needs. In thinking about goals it might be helpful to focus on curriculum areas including speech, language, stuttering, voice, auditory processing, etc. Goals should be prioritized and should follow logically from the stated needs and present level of performance.

The next step is to specify short-term objectives for each annual goal. Instructional objectives should reflect intermediate steps between the present level of functioning and the anticipated annual goals. Example: The student can say initial consonant sounds in words that are unknown to him.

In the objective criteria and evaluation procedures section, the members of the committee must state the criteria and measurement methods which will be used to determine the progress made toward objectives. This

Evaluation criteria should be directly related to the instructional objectives. A standardized test may or may not measure the stated objective. Some other form of evaluation may be more appropriate such as criterion-referenced assessment or observation and documentation of the desired skill/behavior. Baseline data is necessary to determine progress on performance objectives.

The IEP committee must determine the most appropriate, least restrictive environment for the student. The environment is described in the following manner:

1. All educational services considered important to the student's educational goals must be listed, even if these services are not available. All special services required should be stated, including special programs of recreation or physical education.
2. Each educational service should describe the reasons or benefits of the selected educational placement or program. Why was this placement selected over some other alternative? How does this program meet the student's needs? For example, the justification may note the reasons for not selecting a less restrictive environment.

At this time the duration of the IEP should be noted. The program must be reviewed annually. However, for educational purposes, the program should be reviewed whenever goals need revising or the program seems inappropriate for the child's growth.

Parents must be offered an opportunity to be involved in the development of and any change in their child's IEP. One way to document parent participation is to provide a place on the IEP for the parents to sign; however, their signature is not required. If they do not participate in the development or revision of the plan, the district must document at least two attempts (e.g. written notice, phone calls) to involve the parents.

VIII. PROCEDURES FOR DISMISSAL OR REASSIGNMENT

Dismissal is the process whereby a student is removed from participation in a special program. Reassignment is the process whereby a student is placed in another program...

(SBER 6A-6.341(2)(g))

(a) Dismissal criteria shall be developed, based on established performance objectives, and shall be stated in measurable terms. Students shall be dismissed only when dismissal criteria are attained.

(b) Dismissal based on graduation or completion of school prior to completion of remediation shall include a referral to an appropriate agency when available.

(SBER 6A-6.3012(6))

Dismissal criteria should be based on a set of sequential performance objectives that lead to a terminal goal which then becomes the dismissal criteria. Accomplishment of the terminal goal(s) should be a part of the individual educational plan.

Direct clinical intervention may be suspended to allow other factors, e.g. language experience or maturation, to influence the ultimate outcome.

When a student leaves the school system (as opposed to transfer to another school system), the clinician shall refer the student to another agency for the express purpose of continuing the remediation program. The referral shall include diagnostic reports, a description of the individual student plan and an evaluation of student progress.

Dismissal criteria should clearly differentiate between students with normal speech skills (no errors) and those with satisfactory speech skills which may be noticeably in error but not affecting or expected to affect communication.

Dismissal criteria in language should be based on observation of classroom performance, overall language functioning, results of informal tests and results of formal reevaluations.

Dismissal criteria for non-fluent students should include the student's perception of progress, actual reduction or modification of non-fluencies, listener judgement, and maximum expected gains.

Dismissal criteria for voice cases are not as definitive as in other areas of speech pathology. Voice improvement varies according to the standards of the clinician, the type and size of the lesion and the phonatory needs of the patient. Voice improvement cannot be the only criterion for determining the effectiveness of therapy in some cases. Improvement of damaged tissue may be needed. A panel of listeners may assist in clinical judgment. The patient's report that his voice "feels" better is also helpful in evaluating the need for dismissal.

IX. SPECIAL PROGRAM ORGANIZATION

Eligible special programs for exceptional students. Special programs for exceptional students encompass instruction and special education services which provide significant adaptations in one or more of the following: curriculum, methodology, materials, equipment, or environment designed to meet the individual learning needs of exceptional students.

- (1) *Special programs may be structured in one or more of the following patterns so that an exceptional student may receive instruction in a:*
 - (a) *basic class with supplementary consultation or special education services;*
 - (b) *basic class supplemented by itinerant instruction or a resource room program;*
 - (c) *special class either full-time or part-time in a regular school;*
 - (d) *special day school;*
 - (e) *non-public residential or day school through a contractual arrangement or other written agreement;*
 - (f) *special class in a hospital or treatment center;*
 - (g) *individual instruction in a hospital or home setting.*

- (2) Pre-kindergarten programs for exceptional students include:
- (a) Special programs for exceptional students ages three (3) and four (4) as listed in (1) (a)-(g) above.
 - (b) Home instruction or supplemental instruction for deaf, blind, severely physically handicapped or trainable mentally retarded below age three (3). Supplemental instruction is defined as regularly scheduled instruction to a deaf, blind, severely physically handicapped or trainable mentally retarded student enrolled in public or non-public preschool or day care programs.

(3) When an appropriate special program cannot be provided within the district or in cooperation with other districts, a district may utilize non-public schools through a contractual arrangement based on guidelines issued by the director of the division of elementary and secondary education.

(4) When a district provides a special program for exceptional students by assigning instructional personnel to a facility operated by another agency or organization, a written agreement shall be developed outlining the respective duties and responsibilities of each party.

(SBER 6A-6.311)

Describe the continuum of alternative placements consistent with rule 6A-6.311, FAC which will be used. When a district uses a facility operated by another agency or organization, include a copy of the written agreement, as required by rule 6A-6.311(4), FAC.

(SBER 6A-6.341(2)(h))

A. PROGRAM MODELS

Program services and scheduling models should be designed to meet the communication needs of the population to be served. Among those models to be considered should be the full-time class for severely language disordered students, the resource room where half-day instruction every day is available, or part-time services provided by either intermittent or intensive scheduling for up to twelve hours per week.

Population size and projected incidence are important factors to consider in determining the number of schools to be served per clinician; however, professional interpretation of the need for therapy by students within a school must take precedence.

The district should not require the itinerant language and speech clinician to meet more than 60 student contact hours per week, or the clinician or teacher in a self-contained language class to meet more than 200 student contact hours per week.

The district should provide an itinerant clinician for every 1 to 3 schools, the total number up to 3 determined by identified student needs.

EXAMPLE - Elementary Schools

1. Enrollment in a school of 1,500 students and above = 2 full-time clinicians.
2. Enrollment in a school of 750 - 1,500 students = 1 full-time clinician.

3. Enrollment in a school of 749 and less students = part-time clinician (up to and including $\frac{1}{2}$ time clinician depending on need):

EXAMPLE - Secondary Schools

1. Enrollment in a school of 2,200 students and above = 1 full-time clinician.
2. Enrollment in a school of less than 2,200 students = part-time clinician (up to and including $\frac{1}{2}$ time clinician depending on need).

When there are six or more classes for exceptional students in special programs at a school site, a full-time clinician should be housed to assist these students. In addition, a clinician should be employed on a part-time or full-time basis, depending on need, to serve students with communicative disorders who are enrolled in regular classrooms.

Direct clinical intervention or contact, shall be that model in which the student attends therapy sessions with the clinician or an aide supervised by the clinician. Indirect clinical intervention for a student may include such activities as teacher or parent consultation, modification of program materials or procedures in the regular classroom, or teacher in-service education programs.

B. SCHEDULING

Contact hours (CH) are generated as a function of the number of minutes scheduled during each session for each student; for example:

1. Student A receives 45 minutes during each of 3 sessions per week for a total of 2 $\frac{1}{2}$ CH
2. Student B receives 30 minutes during each of 4 sessions per week for a total of 2 CH
3. Student C receives 60 minutes during each of 2 sessions per week for a total of 2 CH

Scheduling can have a significant effect on the number of contact hours generated; for example:

1. 3 students receive 60 minutes during each of 2 sessions a week for a total of 6 CH
2. 3 students receive 30 minutes during each of 2 sessions a week for a total of 3 CH

When scheduling, the primary consideration should be given to flexibility in the length of sessions and the number of sessions per week scheduled for each student.

The number of students in a caseload does not determine the number of contact hours generated unless all sessions are scheduled for the same number of minutes for all students; i.e. each student receives 60 minutes per week. This practice should be avoided as it does not reflect scheduling based on individual student needs.

The effect of scheduling on contact hours generated by larger or smaller caseloads is reflected in the following:

(a)	# stud.	CH	(b)	# stud.	CH
8:30-9:00	3	1.5	8:30-9:30	2	2.0
9:00-9:30	1	.5	9:30-10:30	3	3.0
9:30-10:00	2	1.0	10:30-11:00	2	1.0
10:00-10:30	4	2.0			
10:30-11:00	2	1.0			
	<hr/>	<hr/>		<hr/>	<hr/>
	12	6.0		6	6.0

Scheduling should be completed after students requiring direct services have been identified and therapy recommendations have been made.

Within any clinical assignment, the following items should be considered when scheduling:

1. The number of identified students.
2. The therapy recommendations (IEP).
3. The number of schools served.
4. Other scheduled exceptional education programs or remedial programs.
5. Other scheduled academic programs.
6. Lunch, physical education, art, music.
7. The amount of travel time between schools.
8. The length of the school day.
9. Evaluation and coordination time.

Although certain compromises must be made when scheduling, the clinician should emphasize the importance of the services to be offered to the student. The IEP conference may be the appropriate time to resolve scheduling conflicts.

C. PROGRAM COMPONENTS

The district should provide the language and speech clinician at least one-half day per week during student attendance time for student observation, referral testing, evaluations and other procedures necessary for the effective management of the language and speech programs.

The language and speech clinician is responsible for total program management which includes the entire process of screening, evaluation, identification, educational planning and clinical intervention. To properly identify students for program placement, comprehensive diagnostic services should be provided those students determined by

screening or referral to have potential language and speech disorders. Diagnostic testing requires a minimum of one to two hours of preparation, administration and interpretation. Additionally, student observation can be an integral part of the assessment process. Provisions should be made to permit these activities to be accomplished as part of the regular services of the clinician, just as the classroom teacher has planning time during regular student attendance time.

The district should provide at least one-half day per month for regularly scheduled staff meetings. Intracommunication among staff members and sections of the program should provide for more efficient program planning, development and evaluation. The districts should provide meeting time for all staff members to give them the opportunity to help establish procedures for student programs, clinician inservice and to exchange professional information.

The district should make provisions for an ongoing budget for the language and speech program for the purchase and repair of equipment and materials. Equipment used for the reproduction of speech and voice samples shall be of the highest fidelity and be faithful in the reproduction of the individual's speech. Electronic equipment shall be calibrated annually and evaluated for replacement every five years.

Language and speech programs should have and use data reporting systems to facilitate program planning, management and evaluation and to permit the acquisition of current information at program and case management levels. Data collection systems should serve as a vehicle for improving communication, preserving pertinent information and facilitating program and student evaluation.

Information in the student's permanent folder should be available to the clinician as well as behavioral observations provided by the referring teacher or staff members. Notations concerning dates of enrollment and dismissal in the speech-language program should be made on the student's permanent records.

Records of all services provided for each student by the clinician should be detailed, meaningful, comprehensive and currently complete. These records and reports should be signed and dated by the clinician and should be written in professional language with a cover summary in layman's language.

X. INSTRUCTIONAL PROGRAM

Eligible special programs for exceptional students. Special programs for exceptional students encompass instruction and special education services which provide significant adaptations in one or more of the following: curriculum, methodology, materials, equipment or environment designed to meet the individual learning needs of exceptional students.

(SBER 6A-6.311)

Specify the philosophy, curriculum(s), and methodology for the special

A. PHILOSOPHY

The district should establish a basic philosophy for the development and implementation of a language and speech program.

A basic philosophy should be based on goals and objectives that are designed to meet the varying communication needs and skills of individual students. The philosophy should reflect comprehensive planning based on a continuum of services. The philosophy, goals and objectives should be known to school administrators, teachers, parents and other professional personnel within the community.

The program philosophy should ensure that an individual student's needs remain central to the provision of services.

EXAMPLE:

Adequate communication skills are essential to academic, social and economic success; therefore, every student manifesting a communication disorder shall have the right to appropriate services from the language and speech program. These services shall be designed to improve communication skills to a level commensurate with physical and mental ability.

B. CURRICULUM & METHODOLOGY

The district should establish curriculum(s) and methodology that are organized around the particular communication needs of the student.

The development of curriculum(s) should allow for continuity and comprehensive assistance to the divergent population requiring assistance for communication disorders. Those methodologies for each disorder (speech, language, fluency, voice) that are implemented by staff clinicians should be identified and based on professionally recognized approaches to therapy. A rationale for the use of specific approaches should be developed in accordance with the specific needs of the students as determined by the development of the IEP.

1. Speech

Consideration should be given to effective and efficient programming of remedial procedures for speech disorders. All resources should be used including parents, teachers, students, aides and home programs.

Paraprofessionals and aides with appropriate supervision should be considered for use in screening and carry-over programs.

Particular attention should be given to carry-over programming in order to develop speech skills to maximum usefulness in the shortest time.

Procedures should be developed to assist teachers and parents in understanding maturational misarticulations. When appropriate,

clinicians should develop strategies for use by parents and teachers that will reduce the impact of maturational misarticulations and help them provide the student with experiences to promote speech development.

Tongue thrust, per se, is not a communication disorder and students with this problem should not be enrolled in a therapy program that generates weighted FTE in speech and language.

2. Language

Intervention strategies in language areas should be selected on the basis of deficit skills, developmental level and readiness, age of the child, utility and usefulness in communication and reasonable prognosis for language improvement, among other considerations.

Goals should be selected which reasonably reflect language usage in the student's communication environment.

Programs useful for remediating specific language deficits are available commercially. In addition, methods and techniques can be selected from current literature in language, linguistics, mental retardation, aphasia and general education.

Consideration should be given to the type and complexity of the language required of students in the academic classroom.

Since language usage affects all aspects of communication and the individual's ability to interact as a social being, remediation of language disorders should take place in an environment which utilizes all resources, including multisensory programming, parent-teacher-child interaction and team approaches in content areas. This is most important when considering the needs of severely language delayed and disordered students.

Consideration should be given to a student's potential for expressive language when conditions such as paralysis, organic and central nervous system problems interfere with expression. If receptive abilities are intact and otherwise adequate for expression, criteria may be developed for the use of communication boards, or other non-vocal communication aids.

Consideration should be given to a student's standard dialect and/or native language, if different from standard English. The decision to provide handicapped services to such a student should be made after a thorough examination of deficits in English, and the non-standard dialect and/or native language, if feasible. Additional information should be requested from parents, teachers and students when practicable.

3. Fluency

Consideration should be given to developing effective teacher education about fluency disorders and referral procedures to identify students

with fluency disorders.

Consideration should be given to developing a clinical relationship with parents and provide counseling as necessary. Speech Foundation of America pamphlets are an inexpensive resource.

Consideration should be given to the age, motivation, severity, expectations for improvement, and self-perception of the problem in selecting clinical strategies for non-fluent students.

Traditional and current clinical methods reflect a conceptual framework of non-fluent behavior: its cause, maintenance and remediation. If clinical activities are selected from a variety of methodologies, the IEP should include short term objectives in a sequence which could reasonably be expected to remediate the disorder.

Effective clinical intervention should include procedures for a change of non-fluent behaviors, a change in attitudes, conceptions, and evaluations and the counseling of students and parents. If the nature of the problem indicates a need for psychotherapy, referral should be made to a qualified psychologist or psychiatrist.

4. Voice

Therapy objectives should be developed directly from diagnostic evidence. Approaches can take many directions depending upon the type of disorder, e.g. organic, non-organic, pitch, loudness, nasality, harshness.

Pre- and post-tape recordings are recommended to determine future therapy directions.

Consideration should be given to the student's perception of the problem and the listener's reaction. Basic approaches to the remediation process should include teaching an understanding of the voice and its use, developing discrimination abilities, eliminating inappropriate vocal use, and developing correct use of pitch, loudness, rate and resonance. In some cases, referral for psychological counseling may be necessary before any improvement in voice quality can be realized.

XI. SUPPORTIVE SERVICES

Supportive services are media and material services, assessment, student services, parent education and counseling services, and treatment services....

(SBER 6A-6.341(2)(j))

A school district should designate a speech and language clinician to provide full time diagnostic services in speech and language disorders on a student population ratio of 1:30,000.

The speech and language clinician who is designated as a diagnostician should provide comprehensive differential diagnosis, assessment and educational planning

for some students with communication disorders. The clinician should be part of the psycho-educational team which may include psychologists, physicians, social workers and other professionals. The employment of the clinician for full time assessment tasks will relieve the school-assigned clinician for more intensive therapy scheduling. Time should be provided for the exchange of information between this clinician and the school-assigned clinician.

The use of agencies, clinics, physicians, and other resources within the community is essential for initiating and procuring those services necessary for the provision of a comprehensive program. No district school programs can directly provide all of the services needed by the students. Therefore, it is necessary to be familiar with and to use community resources.

What community resources are available? Within the organization of Health and Rehabilitative Services (HRS) for the State of Florida there are the following agencies:

1. Mental Health offers diagnostic and counseling services for children, adults and families.
2. Dental Clinic for Low Income Children is a part of some local health department. Call your health department for more information.
3. Children's Medical Services (CMS) will provide a pediatric examination for any child (birth to 21 yrs.) who is referred. Depending on the physician's findings and recommendation, further referrals are made by CMS. Referral to CMS is usually made by a physician, county health unit or the school health nurse who will take the referral from the school clinician. CMS services are based on predetermined financial and medical criteria. No child is refused services due to inability to pay.
4. Protective Services is very helpful in "compelling" parents (guardians) to "cooperate" with the need for services for their child. If all school avenues for parental cooperation have been exhausted, refer to Protective Services.

Within each county and school system the following agencies are available:

1. The Health Department provides physical examinations, medication and information and referral to other agencies.
2. The Florida Diagnostic and Learning Resource System provides resources and makes arrangements necessary for in-depth diagnostic evaluations over and above those available within the school district. In addition, test materials and equipment are available for use. The Child Find program is also a part of this system. Child Find is used to locate and refer children (especially at the preschool level) for services and to counsel and educate parents.

3. Social workers, both within the school system and from other agencies, are sources of pertinent information and serve as a go-between from school to parents and back. They can also assist by conducting home visits, filling out information forms and arranging for transportation.
4. Local Community Action Programs (CAP) will provide transportation services.
5. Local medical associations and their members will greatly aid in the referral process. A swift and complete response to a request for recommendations will be forthcoming if the clinician has established lines of communication with the medical community.
6. Local service organizations such as Lions, Jr. Women's, Kiwanis and Rotary may provide money and equipment.
7. Colleges and universities, especially those having speech, hearing and/or medical departments, can provide diagnostic and/or therapy services, usually for a nominal fee.

All of these agencies and organizations can be useful for many different purposes, including but not limited to, medical examinations and recommendations, prescriptions and prescriptive aids, partial or total payment of expenses, parental involvement and follow-up. In order to obtain maximum benefit from these resources, the clinician must be responsible for initiating referrals, coordinating the services, following up on all referrals and reporting all pertinent recommendations to the parents, teachers and other involved school personnel.

XII. PROCEDURES FOR PROVIDING HOUSING

Size of space and occupant design capacity criteria:

Grade Level	Program Facility Space	Occupant Design Capacity	Net Square Feet Per Occupant for Instructional Classrooms or Laboratories			For Related Space in Net Square Feet
			Min.	Norm.	Max.	
N-12	Exceptional Child Itinerant Instructional Space	5	30	32	34	P-5
N-12	Exceptional Child Resource Room	10	50	53	55	P-5
P-5	Storage Material		95	100	105	

(SBER 6A-2.32)

Special policy used by district for locating and housing the special

The district should meet the minimum requirements for provision of facilities for the itinerant language and speech program.

- A. The minimum square footage of instructional space should be 150. In mobile, or portable units, minimum instructional space should be 75 square feet.
- B. The same facility within the school setting should be available from one therapy session to another. The facility should not be shared by any other individual while therapy is in session.
- C. The facilities should include work space, seating space, storage space and furnishings. A teacher's desk and chair, lockable file cabinets, a mirror and a table and chairs appropriate to the age of the students should be provided.
- D. The facilities should be free from extraneous noise. Adequate acoustical treatment should be provided on walls, ceiling, floor, and around windows and doors to reduce the ambient noise level to 65 dB ISO as registered on the C scale of sound level meter.
- E. Glare proof, shadow proof lighting should be provided with controls accessible within the therapy room. The room should be well ventilated, heated and cooled with controls to allow independent cooling and heating from the remainder of the building. Independent heat pumps should be required to allow the clinician the ability to shut down distracting noise during critical testing.
- F. The facility should be away from the normal flow of heavy traffic, but should be readily accessible to those students who might have mobility or motor difficulties.

III. PROGRAM EVALUATION

(2) EDUCATION EVALUATION - The Commissioner of Education shall periodically examine and evaluate procedures, records, and programs in each district to determine compliance with law and rules established by the state board.

Such evaluations shall include, but not be limited to:

- (a) Reported full-time equivalent membership in each program category.
- (b) The organization of all special programs to ensure compliance with law and the criteria established and approved by the state board pursuant to the provisions of this section and ss. 230.23(4)(m) and 233.0682.
- (c) The procedures for identification and placement of students in educational alternative programs for students who are disruptive or unsuccessful in a normal school environment and for diagnosis and placement of students in special programs for exceptional students, to determine that the district is following the criteria for placement established by rules of the state board and the procedures for placement established by that district school board.
- (d) An evaluation of the standards by which the school district evaluates basic and special programs for quality, efficiency, and effectiveness....

(Section 229.565 F.S.)

A. STATE LEVEL CONSIDERATIONS

Educational program audits. The commissioner, utilizing department auditing staff as well as program staff in the division of public schools and the division of vocational education, shall require periodic examinations and audits of the accounts and programs of each school district in accordance with the provisions of section 229.565, Florida Statutes.

- (1) Responsibility for conducting audits is hereby assigned and delegated among organizational units of the department as follows, provided that the commissioner shall, whenever practicable, require coordination between such units in carrying out assigned responsibilities:

- (a) The division of public schools shall be responsible for:

2. Examination of exceptional student programs to determine compliance with law and criteria established by rules of the state board, and to ensure that assigned students have been properly classified and placed.

- (2) Following the completion of each audit a written report shall be prepared, signed by the person or persons responsible for the audit, and transmitted to the commissioner with copies to the director of the division of public schools and the director of the division of vocational education. In addition to the data required by section (229.565) Florida Statutes, the auditor shall identify all instances of:

- (a) Errors in the reported full-time equivalent membership by program category;
 - (b) Improper classification or placement of individual students assigned to exceptional student programs; and
 - (c) Failure of classes or programs to meet criteria established by the state board, pursuant to sections 230.23(4)(m) and 233.0682, Florida Statutes, for special programs.

(SBER 6A-1.453)

The 1975 Florida Legislature enacted legislation requiring the Commissioner of Education to conduct program audits in vocational education, adult education, and special programs for exceptional students. The Bureau of Education for Exceptional Students has been assigned the responsibility of conducting audits in exceptional student education. The objectives of these audits are to verify compliance with state board of education rules, Florida statutes, and Federal regulations as they apply to exceptional student education and to render recommendations for program improvement in the school districts' programs for exceptional students. Compliance is determined through on-site interviews with district personnel, review of records and reports, and classroom visitations. Program implementation is verified against the rules and regulations and the program description found in District Procedures for Providing Special Programs for Exceptional Students, a document written by each school district. Major audit components include verification of procedures established for screening, identification, placement, dismissal and other areas as described in this Resource Manual. Following the audit, a program audit report is written which presents findings as to compliance/non-compliance within each component and recommendations for consideration toward program improvement.

B. DISTRICT LEVEL CONSIDERATIONS

Specify procedures for evaluating the program.

(6A-6.341(2)(l))

Evaluation of the speech and language program shall be in accordance with the stated goals and objectives of the program. Evaluation of the clinical-educational management provided each student shall result in the redefinition of objectives and modification of the clinical intervention program.

Programs can be evaluated by collecting data to evaluate the components written into each objective. Evaluation should be based on the quality of the program goals and objectives, the collection of data for each goal and objective and the analysis of the data collected. Evaluation should provide information for decision making to improve services and to plan for continuing, modifying, expanding or deleting selected program components.

The following list designates general areas that should be considered when evaluating program policies and procedures. This list is taken in part from the American Speech-Language-Hearing Association's manual Essentials of Program Planning, Development, Management, Evaluation, Washington, D.C., 1973, pp. 62-68.

1. Program Policies and Procedures

- a. administrative structure
- b. staff responsibilities
- c. program relationships with other services in the school system
- d. intra-staff communication procedures
- e. employment practices
- f. supervision and evaluation practices
- g. relationships with outside resources and agencies
- h. screening and diagnostic practices
- i. program models
- j. general instructional practices
- k. parental involvement

2. Student Information

- a. total school population
- b. number and percent of students identified
- c. types of population being served
- d. types of disorders identified
- e. placement of students
- f. range of caseloads and average caseloads
- g. dismissal rate
- h. future projections of students requiring services

3. Staff Information

- a. staff to student ratio in total population
- b. staff to student ratio in specific delivery system
- c. salaries of staff members
- d. staff experience and education
- e. staff activities

4. Financial Information

- a. current sources and expenditures of funds
- b. potential sources of additional income

5. Facilities

- a. existing facilities for program
- b. procedures for acquiring facilities
- c. financial aspects of facility change

6. Equipment and materials

- a. equipment and materials available
- b. procedures for obtaining and distributing equipment and materials
- c. procedures used to evaluate materials and equipment

XIV. PERSONNEL

The district should provide program supervision by an individual(s) who shall hold a Master's degree in speech pathology, or its equivalent, according to the following:

In a program where fewer than ten (10) staff members are employed, an appropriately qualified staff member with a minimum of three years clinical experience should be assigned coordination responsibilities on at least a part-time basis.

In a program where ten (10) to twenty-nine (29) staff members are employed, a full-time supervisor with a minimum of three years clinical experience should be employed.

In a program where more than twenty-nine (29) staff members are employed, one staff member should be assigned administrative duties and additional supervisors should be employed for every fifteen (15) clinicians in excess of twenty-nine (29).

The district should employ speech and language clinicians holding a valid Florida teacher's certificate with coverage in speech correction. All new employees, who have completed speech pathology training programs since 1978, should hold a master's degree.

All applicants should be carefully evaluated so that only the best candidates may be considered for employment. Any candidate with an obvious communication difficulty should not be employed for direct therapy contact with the students.

It is preferable that aides should have some clinical experience with students. Supervision of aides should be on a more intensive basis than supervision of certified personnel.

Evaluation of all personnel, annual or continuing contract status, may be a major responsibility of the program supervisor. Anecdotal records should be kept on all conferences, observations or other supervisory tasks.

Every clinician should have a copy of the District Procedures for Providing Special Education for Exceptional Students in Language and Speech.

The entire staff has the responsibility for providing an effective remedial program to students. Each staff member has specific duties and technical skills to meet this responsibility.

Some of these duties and skills are described below:

1. Chairperson
 - a. overall coordination of program procedures.
 - b. supervision of staff.
 - c. staff development.
 - d. dissemination of current clinical and educational materials or methods.
 - e. assistance to clinicians and principals in school program planning and procedures.
 - f. development of new program procedures and innovative projects.
 - g. interpretation of Federal, State and local rules and regulation.
 - h. consultation and assistance to parents, other staff and community agencies in case finding, identification and placement of students.
 - i. school-community liaison.
2. Speech-language clinician
 - a. implementation and follow-up of referral procedures.
 - b. coordination of identification, evaluation, eligibility, placement and IEP procedures.
 - c. provision of direct and indirect remedial services to students.
 - d. assistance and consultation to parents and teachers to enhance clinical effectiveness.
 - e. provision of statistical information for program planning.
 - f. provision of staff development.
 - g. ordering of materials.
3. Resource-special class teacher
 - a. participation in the development of comprehensive IEP's for students including all pertinent school resources.
 - b. provision of effective remediation.
 - c. development of effective communication among other school personnel.
 - d. provision of appropriate classroom management.
 - e. provision of assistance to and consultation with parents.
4. Diagnostician
 - a. coordination of an efficient referral procedure and scheduling of evaluations and appropriate follow-up.
 - b. provision of comprehensive diagnostic evaluations to students.
 - c. interpretation of test results to clinicians, teachers, psychologists and parents.
 - d. provision of inservice programs to staff and others.
 - e. review and recommendation of current test instruments.
 - f. examination of and research into problems related to testing.
 - g. provision of preliminary educational goals based on diagnostic information.

All members of the staff have the responsibility to develop their respective roles and ensure that other school personnel understand the services offered.

The guidelines for developing job responsibilities outlined in the American Speech-Language-Hearing Association's Planning, Development, Management and Evaluation (PDME) manual can assist the clinician in studying a particular job category.

It may be appropriate to develop speech aides or paraprofessional positions to release clinicians from routine, standardized tasks. These could include screening, record keeping, making materials, and providing practice exercises to students.

Aides should only be utilized after consideration is given to the following areas:

1. Job responsibilities specified.
2. Minimum training and special training specified, including experience.
3. Responsibility for supervision specified (this should be continuous supervision by a Master's level clinician with at least 3 years experience).
4. Requirements for continuing education specified.

XV. STAFF DEVELOPMENT

A. INSERVICE

Inservice, for the sake of this resource manual, will be considered any method for updating the skills of a speech and language clinician serving the public schools. Training can take place on the national, regional, state or local level.

1. National and Regional Level

- a. The American Speech-Language-Hearing Association (ASHA) provides opportunities for training both at the annual national convention in the fall and at regional conventions held in the spring. These conventions offer a wide choice of workshops and short courses. Inservice points may be given by the district for attendance. Continuing education credit is sometimes given for extensive workshops.
- b. Universities often offer regional workshops which are advertised in a number of ways, most frequently by mailings to professionals in the state. Clinicians should share this information.
- c. School districts may provide professional leave time to attend out-of-state or regional conferences and some will offer reimbursement of expenses.

2. State Level

- a. The Bureau of Education for Exceptional Students (BEES), under the guidance of the State Consultant for Speech & Language Impaired, offers many training opportunities.

- (1) Weekend With the Experts - Four weekends are devoted to bringing well known professionals to the state to conduct 2-day workshops. Notices are sent to all clinicians in the fall. There is a registration fee for the four weekends as a package. Graduate credit can be received through Florida State University or inservice points through the school district.
 - (2) Special Study Institutes may be offered at any time during the year. School districts nominate individuals as participants and enrollment is limited. It is an intensive workshop (3 to 4 days) on a specific topic. The intent is for the participant to share the information received from the institute with other district personnel.
 - (3) The Consultant is available to visit districts and share "best practices" found in other districts.
- b. The Florida Language, Speech and Hearing Association (FLASHA) offers a wide variety of workshops and papers at its spring convention. A "credit institute" is highlighted. Graduate credit from Florida State University is given. Many districts award inservice points for attendance.
 - c. Universities, private organizations, and service clubs offer workshops throughout the state. The difficulty often is finding when and where these will be held. Requesting information from the Bureau of Education for Exceptional Students (904-487-2840) or the FLASHA State Office (813-665-6060) may be helpful.
 - d. The Florida Diagnostic and Learning Resource System (FDLRS) is a statewide system of material and training centers. Each center develops and implements inservice components. The center coordinator can be contacted to arrange for programs.

3. Local Level

Speech and language coordinators/contact clinicians should be closely involved in the development of district inservice programs designed to remediate the weaknesses in the district's speech and language program. These weaknesses are determined by a needs assessment in which the clinicians participate. Inservice may include programs which are required or optional, during or after working hours, and which offer inservice points or college credit. Examples of formats:

- a. Courses may be offered on campus or as an extension service to a geographic area if there are enough participants. Small counties may combine efforts with the help of FDLRS to obtain courses.
- b. Workshops may be offered on "inservice days" or weekends. Inservice points are given.
- c. Informal evening meetings to share new materials, activities, programs or tests may be developed with or without inservice points. This "sharing experience" offers an opportunity to share concerns with other professionals.

Aside from the professional need to constantly update skills, clinicians are required to renew teaching certificates every five years. Due to current and proposed changes in certification requirements, it is advisable to contact for further information:

Administrator
Certification Section
Department of Education
452 Knott Building
Tallahassee, Florida 32301

SELECTED READINGS

SPEECH

- Auditory Learning Activities, FLRS-East, 1274 South Florida Avenue, Rockledge, Florida 32955
- Barrett, Mark D. and Welsh, John W. Predictive Articulation Screening. Language, Speech and Hearing Services in Schools, VI(2), 91-95, July, 1975.
- Bralley, Ralph C. and Stoudt, Ralph J. Jr. A Five-Year Longitudinal Study of Development of Articulation Proficiency in Elementary School Children. Language, Speech and Hearing Services in Schools, VII(3), 176-180, July, 1977.
- Costello, Janis and Onstine, Joanne. The Modification of Multiple Articulation Errors Based on Distinctive Feature Theory. JSHD, 41(2), 199, May, 1976.
- Dopheide, William R. and Dallinger, Jane R. Preschool Articulation Screening By Parents. Language, Speech and Hearing Services in Schools. VII(2), 124-127, April, 1976.
- Irwin, Ruth Beckey, West, Joyce Fitch and Trombetta, Mary Ann. Effectiveness of Speech Therapy for Second Grade Children with Misarticulations - Predictive Factors. Exceptional Children, 32(7), 471-479, March, 1966.
- Jelinek, Janis A. A Pilot Program for Training and Utilization of Paraprofessionals in Preschools. Language, Speech and Hearing Services in Schools, VII(2), 119-123, April, 1976.
- Martin, Virginia E. Consulting With Teachers. Language, Speech and Hearing Services in Schools, V(3), 176-179, July, 1974.
- Martin, Virginia E. Helping Teachers Decide When to Refer. Language, Speech and Hearing Services in Schools, VI(3), 154-155, July, 1975.
- Martin, Virginia E. Suggestions For Teacher Consultation. Language, Speech and Hearing Services in Schools, VII(2), 134-136, April, 1976.
- Mason, Robert M. and Proffit, William R. The Tongue Thrust Controversy: Background and Recommendations. JSHD, 39(2), 115-132, May, 1974.
- Milestones in Communication - What Children Should Do at Different Times Through Age Five. Special Education Report, 2-8, January, 1977.
- Pendergast, Kathleen, et.al. An Articulation Study of 15,255 Seattle First Grade Children With and Without Kindergarten. Exceptional Children, 32(8), 541-547, April, 1966.
- Sander, Eric K. When Are Speech Sounds Learned? JSHD, 37(1), 55-62, February, 1972.

Wing, Clara S. Evaluating the English Articulation of Normative Speakers. Language, Speech and Hearing Services in Schools, V(3), 143-148, July, 1974.

LANGUAGE

Caster, Jerry A. The Teacher: An Ally for the Clinician Serving Retarded Pupils. Language, Speech and Hearing Services in Schools, IV(1), 41-44, January, 1973.

Gottesman, Ruth L., Ed. D. Auditory Discrimination Ability in Negro Dialect-Speaking Children. J. of Learning Disabilities, 5(2), 38-45, 1972.

Holland, Audrey L. Language Therapy for Children: Some Thoughts on Context and Content. JSHD, 40(4), 514-523, November, 1975.

Krackawizer, Daga and Janison, Jennifer. Possibilities for Use of the LAC and ADD by Teachers and Speech Specialists. Language, Speech and Hearing Services in Schools, V(2), 98-102, April, 1974.

Lee, Laura L. Recent Studies in Language Acquisition. Language, Speech and Hearing Services in Schools, I(1), 24-29, January, 1971.

Mitchell, Marlys, Evans, Carolyn and Bernard, John. Trainable Children Can Learn Adjectives, Polars, and Prepositions. Language, Speech and Hearing Services in Schools, VIII(3), 181-187, July, 1977.

Pickering, Marisue and Kaelber, Patricia. The Speech-Language Pathologist and the Classroom Teacher: A Team Approach to Language Development. Language, Speech and Hearing Services in Schools, IX(1), 35-42, January, 1978.

Rosenthal, William S. The Role of Perception in Child Language Disorders. Audio Journal, 2(7), July, 1977.

Sharf, Donald J. Some Relationships Between Measures of Early Language Development. JSHD, 37(1), 64-74, February, 1972.

FLUENCY

Hanna, Richmond, Wilfling, Franz and McNeill, Brent. A Biofeedback Treatment for Stuttering. JSHD, 40(2), 270-273, 1975.

Jones, Elizabeth. The Stuttering Child. Danville: Interstate Printers and Publishers, 1967.

Laeder, Ronald and Francis, William C. Stuttering Workshops: Group Therapy In a Rural High School Setting. JSHD, 33(1), 38-41, February, 1968.

Perkins, William H. Articulatory Rate in the Evaluation of Stuttering Treatments. JSHD, 40(2), 277-278, May, 1975.

Woods, C. Lee, Cocke, Rolin P., Hughes, Janet H., and Woods, Gay A. Fluency Therapy, Outline of Objectives and Possible Procedures. ASHA Convention, Detroit, Michigan, 1973.

VOICE

Boone, Daniel R. Dismissal Criteria in Voice Therapy, JSHD, 39(2), 133-139, May, 1974.

Boone, Daniel R. The Voice and Voice Therapy. (2nd ed.): Prentice Hall, 1977.

Drudge, Mary K. and Philips, Betty Jane. Shaping Behavior in Voice Therapy. JSHD, 41(3), 398-411, August, 1976.

Freedman, Susan and Garstecki, Dean. Child Directed Therapy For a Non-Organic Voice Disorder. Language, Speech and Hearing Services in Schools, IV(1), 8-12, January, 1973.

Knight, Helen. Laryngological Referrals: A Serviceable Procedure. Language, Speech and Hearing Services in Schools, IV(4), 196-198, October, 1973.

Mason, Robert M. and Grandstaff, Harvey L. Evaluating the Velopharyngeal Mechanism in Hypernasal Speakers. Language, Speech and Hearing Services in Schools, I(4), 53-61, October, 1971.

Mitchell, Mary and Phillips, Betty Jane. Shaping Behavior In Voice Therapy. JSHD, 41(3), 398-411, August, 1976.

Silverman, Ellen-Marie and Zimmer, Catherine H. Incidence of Chronic Hoarseness Among School-Age Children. JSHD, 40(2), 211-215, May, 1975.

Stone, Ed, Hyrlbutt, Nancy and Coulthard, Stanley. Role of Laryngological Consultation in Intervention of Dysphonia. Language, Speech and Hearing Services in Schools, IX(1), 35-41, January, 1978.

Wilson, Frank B. The Voice Disordered Child: A Descriptive Approach. Language, Speech and Hearing Services in Schools, I(4), 14-22, October, 1971.

Wilson, Kenneth. Voice Problems in Children. Baltimore: Williams and Wilkins, 1972.

RELATED

Ahr, A. Edward (Ed.) Speech Therapy: Illustrative Behavioral Objectives, Methods, Evaluation Techniques. Skokie, Illinois: Priority Innovations, 1970.

Busn, Cathy and Banachea, Mary. Parental Involvement In Language Development: The Pal Program. Language, Speech and Hearing Services in Schools, IV(2), 82-85, April, 1973.

Fudala, Janet B. Using Parents In Public School Speech Therapy. Language, Speech and Hearing Services in Schools, IV(2), 91-94, April, 1973.

- Hayes, Josephine and Higgins, Scottie Torres. Issues Regarding the IEP: Teachers on the Front Line. Exceptional Children, 45(4), 267-272, December, 1978.
- Navarro, M. Richard and Klodd, David A. Impedance Audiometry for the School Clinician. Language, Speech and Hearing Services in Schools, VI(1), 50-56, January, 1978.
- Neal, W.R. Speech Pathology Services in the Secondary Schools. Language, Speech and Hearing Services in Schools, VII(1), 6-16, January, 1976.
- Noel, Richard H. Teacher Identification of Elementary School Children with Hearing Loss. Language, Speech and Hearing Services in Schools, IX(1), 24-28, January, 1978.
- Pannbacker, Mary. Diagnostic Report Writing. JSHD, 40(3), 367-379, August, 1975.
- Potter, Robert E. Perhaps We Have Been In This Business of Specific Learning Disabilities Longer Than We Know. Language, Speech and Hearing Services in Schools, IV(2), 86-89, April, 1973.
- Scalero, A.M. The Use of Supportive Personnel in a Public School. Language, Speech and Hearing Services in Schools, VII(3), 150-158, July, 1976.
- Webster, Elizabeth J. Parent Counseling by Speech Pathologists and Audiologists. Language, Speech and Hearing Services in Schools, I(1), 37-47, September, 1970.
- Work, Rhonda S. et.al. Accountability in a School Speech and Language Program: Part I: Cost Accounting. Language, Speech and Hearing Services in Schools, VI(1), 7-13, January, 1975.
- Work, Rhonda S. et.al. Accountability in a School Speech and Language Program: Part II: Instructional Materials Analysis. Language, Speech and Hearing Services in Schools, VII(4), 259-272, October, 1976.
- Zemal, Caroline S. A Priority System of Case-Load Selection. Language, Speech and Hearing Services in Schools, VII(2), 85-98, April, 1977.

APPENDIX

Appendix A	Continuum of Language, Speech, and Hearing Services for Children and Youth
Appendix B	Predicted Prevalence of Language and Speech Handicapped
Appendix C	Acquisition of Consonant Sounds
Appendix D	Development of Some Aspects of Oral Language, 3-8 Years
Appendix E	Language and Speech Tests
Appendix F	Language Assessment Outline
Appendix G	Language Sampling, Analysis, and Training Procedures
Appendix H	Rules for Calculating Mean Length of Utterance
Appendix I	Stuttering Severity Instrument
Appendix J	Voice Profile
Appendix K	Services to Severely and Profoundly Retarded: A Bibliography
Appendix L	Behavior Charting Profile

Figure 1. The continuum of language, speech, and hearing services for children and youth.

CONTINUUM COMPONENTS

COMMUNICATIVE DISORDERS -----> **DEVIATIONS** -----> **DEVELOPMENT**

POPULATION SERVED

Pupils with severe language, voice, fluency, articulation, or hearing disorders

Pupils with mild to moderate developmental or nonmaturational deviations in language, voice, fluency, or articulation, and those with mild hearing loss requiring minimal oral rehabilitation procedures

All pupils in regular or special education classes

PROGRAM GOALS

1. Provide direct, intensive, and individualized clinical-educational services to effect positive changes in the communication behavior of pupils with handicapping disorders

Provide direct and/or indirect clinical-educational services to stimulate and/or improve pupils' communication skills and competencies

Provide prevention-oriented, sequenced, curricular activities to help pupils develop communicative behaviors in appropriate social, educational, and cultural contexts

2. Provide information and assistance to other participants

1. Identification

2. Comprehensive assessment (diagnostic evaluation)

Assessment and evaluation of communicative skills

3. Referral (for additional services)

4. Parent counseling and instruction

5. Pupil counseling and placement

6. Teacher counseling and inservice orientation/instruction

7. Direct clinical-educational management

Direct or indirect clinical-educational management

Demonstration Lessons

8. Program evaluation

9. Pupil reassessment

10. Dismissal and follow-up

11. Research

Consultation (for individual pupils or groups)

SERVICES PROVIDED BY LANGUAGE, SPEECH, OR HEARING SPECIALISTS

PROGRAM TYPES AND ALTERNATIVES

1. Diagnostic center placement

2. Special class placement

3. Regular classroom placement with:
a. Itinerant services
b. Resource room services (emphasis on individual and small group)

Regular classroom placement with:
a. Itinerant services
b. Resource room services (emphasis on group services)

Regular classroom placement with supportive services from other participants

4. Home or hospital services

5. Parent and infant instruction

6. Residential placement

(Transportation, purchased services—may be required to facilitate provision of a service continuum.)

OTHER PARTICIPANTS (most common)

Parents, teachers, administrators, aides, counselors, psychologists, physicians, psychiatrists, social workers, nurses, occupational therapists, physical therapists, and dentists

Parents, teachers, administrators, aides, counselors, psychologists, physicians, psychiatrists, social workers, nurses, and dentists

Parents, teachers, administrators, aides, counselors, and curriculum specialists

Continuum of Language, Speech, and Hearing Services for Children and Youth

A P P L E N D I X A

Source: Standards and Guidelines for Comprehensive Language, Speech, and Hearing Programs in the Schools. American Speech-Language-Hearing Association, Washington, D.C. (1973-74).

A P P E N D I X B

Predicted Prevalence of Language
& Speech Handicapped

Prevalence studies over the past few years have stated various figures representing a language and speech handicapped population for the school age population, 3-18 years of age. A BEH (1972) study estimated a prevalence of 3.5% for speech disorders and a NINDS (1969) report estimated .25% for language disorders. The final report of the American Speech-Language-Hearing Association Manpower Resources and Needs in Speech Pathology/Audiology (1974)¹ suggested that these combined figures "utilizes an extraordinarily conservative overall prevalence of 3.75% for significant speech and language impairment. Although prevalence of speech and language impairments decreases markedly with age in this population, an overall estimate of this low (e.g., 3.75%) is probably based on records of major disabling condition."

The report then suggests a speech and language habilitation model (S-L Model II) based on a different estimate of prevalence. "Because speech and language impairments are commonly associated with other disabling conditions, it is necessary to identify, among the other categories of handicaps, those requiring clinical speech and language intervention. Of the 6.535% handicapped school-aged children not included in the 3.5% Speech Disorders category, 2.8% is a conservative estimate of additional speech and language impaired children that need the profession's services. Thus, S-L Model II utilizes a total prevalence estimate of 6.3%."

Another way of estimating the number of children in other categories of handicaps requiring direct clinical assistance by language and speech clinicians is to look at each individual category. The following estimates are based on professional empirical data.

- a. 3.5% of ADM minus 9.59% of ADM population = speech disorder as primary handicap.
- b. 25% of EMR students require direct clinical assistance.
- c. 40% of TMR students require direct clinical assistance.
- d. 25% of SLD students require direct clinical assistance.
- e. 100% of deaf population require direct direct clinical assistance.
- f. 12% of emotionally disturbed students require direct clinical intervention.

* * * * *

¹American Speech-Language-Hearing Association, Manpower Resources and Needs in Speech Pathology/Audiology, Washington, D. C. (1974).

- g. 12% of socially maladjusted students require direct clinical intervention.
- h. 12% of blind and partially sighted require direct clinical assistance.
- i. 40% of physically handicapped require direct clinical assistance.
- j. 60% of hard of hearing require direct clinical assistance.
- k. 3.5% of gifted require direct clinical assistance.
- l. 3.5% of homebound and hospitalized require direct clinical assistance.
- m. .09% of population have language disorders and require full-time (school day) involvement by clinicians.

APPENDIX C

Acquisition of Consonant Sounds

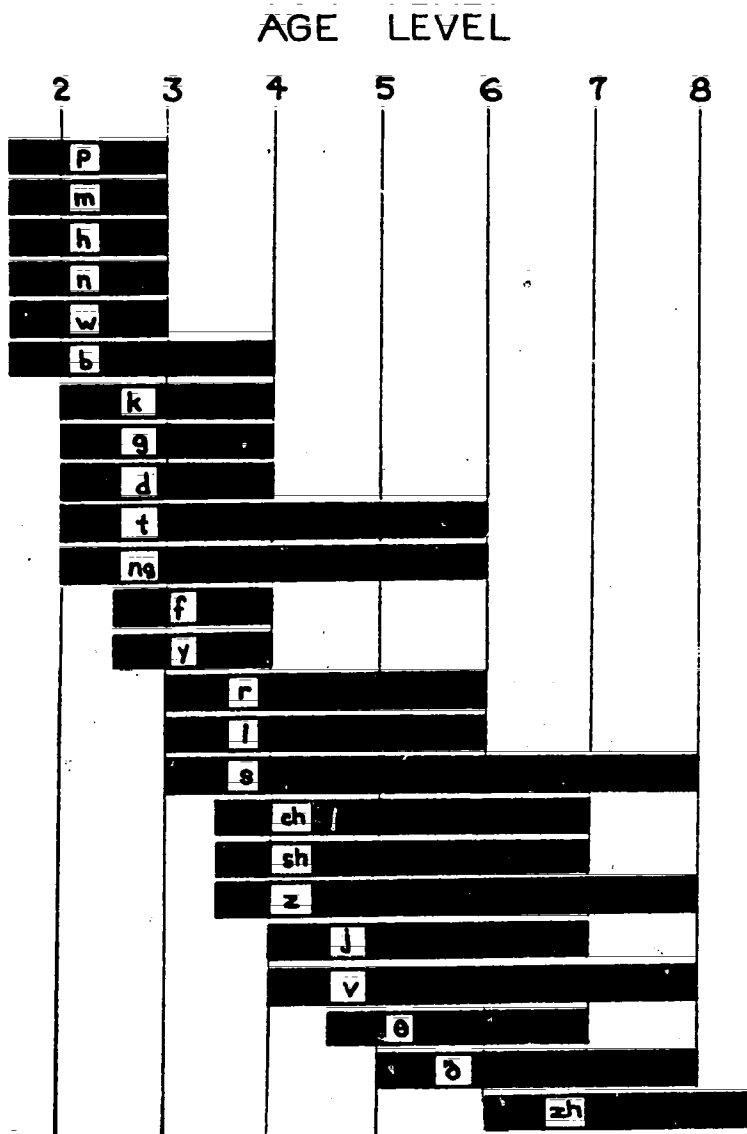


Figure 1. Average age estimates and upper age limits of customary consonant production. The solid bar corresponding to each sound starts at the median age of customary articulation; it stops at an age level at which 90% of all children are customarily producing the sound. (From Templin, 1957; Wellman et al., 1931.)

Source: Sander, Eric K. When Are Speech Sounds Learned? JSHD, 37(1), 55-62, February, 1972.

APPENDIX D

Development of some aspects of oral language, 3-8 years.

Phonological Development	Syntactic Development	Semantic Development																				
<p>Fairly intelligible speech. Substitution, omission and distortion of many phonemes inconsistent, varying with position in word and context.</p> <p>Final consonants appear more regularly than at 30 months.</p> <p>Speech melody develops rapidly although easy repetitions are present.</p> <p>Voice usually well controlled</p>	<p>Generative grammar develops (development by his own rules.)</p> <p>Experiments with many syntactic forms.</p> <p>Two-word phrases most frequent form: That boy (is) naughty; Mommy car stop (Mommy's car stopped; wouldn't run).</p> <p>Designative constructions coming into use: Phrases expanded into subject-predicate sentence. (What that thing go round?) Mean length of response: 3.4 words.</p>	<p>Egocentric speech prevails. Dramatizes, combining words and actions for his own pleasure.</p> <p>Asks questions about persons, things, processes.</p> <p>Names two colors.</p> <p>Tells sex; full name.</p> <p>Verbalizes toilet needs.</p> <p>Vocabulary: Mean number of words: 896</p>																				
<p>Phonemic gains: All English vowels and following consonants are used: /m-/; /m-/; /-m/; /n-/; /-n-/; /n-/; /d-/; /t-/; /k-/; /p-/; /-p-/; /b-/; /-b-/; /f-/; /-f-/; /h-/; /w-/; /-w-/.</p> <p>Articulation still characterized by omission of many medial consonantal phonemes and syllables; does not remember unstressed bits.</p> <p>Speech melody: Blocking in initial syllables frequently interrupts rhythm.</p> <p>Rate of speech increased.</p> <p>Many responses in loud voice or yell.</p>	<p>Grammatical categories. Speech is made up of:</p> <table border="0"> <tr> <td>nouns</td> <td>17%</td> <td>Conjunctions</td> <td>2.2%</td> </tr> <tr> <td>verbs</td> <td>22.8%</td> <td>prepositions</td> <td>6.7%</td> </tr> <tr> <td>adjectives</td> <td>6.5%</td> <td>interjections</td> <td>1.7%</td> </tr> <tr> <td>adverbs</td> <td>10.1%</td> <td>articles</td> <td>6.9%</td> </tr> <tr> <td>pronouns</td> <td>19.8%</td> <td>unclassified</td> <td>6.3%</td> </tr> </table> <p>Uses new adjectives; strong, new, different.</p> <p>Uses new adverbs: maybe, too.</p> <p>Uses auxiliaries: might, could.</p> <p>Gains skill in permutations: Makes questions from declarative statements.</p> <p>Mean length of response: 4.3 words.</p>	nouns	17%	Conjunctions	2.2%	verbs	22.8%	prepositions	6.7%	adjectives	6.5%	interjections	1.7%	adverbs	10.1%	articles	6.9%	pronouns	19.8%	unclassified	6.3%	<p>Closed-cycle linguistic development.</p> <p>Egocentric speech, perception, and inner language reciprocally augmented.</p> <p>Communicative speech developing: Directive speech: Commands, requests, threats.</p> <p>Question asking, "why" stage.</p> <p>Relates experiences with fair understanding of sequence and closure.</p> <p>Says nursery rhymes.</p> <p>Names primary colors.</p> <p>Repetitive use of one in counting: one light and one light; etc.</p> <p>Vocabulary: Mean number of words: 1222.</p> <p>Misuses many words; imperfect understanding.</p>
nouns	17%	Conjunctions	2.2%																			
verbs	22.8%	prepositions	6.7%																			
adjectives	6.5%	interjections	1.7%																			
adverbs	10.1%	articles	6.9%																			
pronouns	19.8%	unclassified	6.3%																			

Development of some aspects of oral language, 3-8 years (cont'd)

Phonological Development	Syntactic Development	Semantic Development																				
<p>4.0 Phonemic Development. 98% of speech intelligible. Articulatory omissions and substitutions sharply reduced. Speech melody (prosody). Vocal pitch controlled. Uses some adult patterns of rhythm. Repetition reduced, thus improving rhythm. Some blocking and associated overt mannerisms may continue.</p>	<p>Skill increasing in transformations (modification in sentence which transforms kernel). Sentence structure advances rapidly: Beginning to use complex and compound sentences, 6-8 words in length. Mean sentence length: 4.2 words. Grammatical categories. Speech is made up of:</p> <table border="0"> <tr><td>nouns</td><td>16.3%</td></tr> <tr><td>verbs</td><td>23.1%</td></tr> <tr><td>adjectives</td><td>6.7%</td></tr> <tr><td>adverbs</td><td>10.4%</td></tr> <tr><td>pronouns</td><td>20.3%</td></tr> <tr><td>conjunctions</td><td>2.8%</td></tr> <tr><td>prepositions</td><td>7.5%</td></tr> <tr><td>interjections</td><td>1.3%</td></tr> <tr><td>articles</td><td>7.5%</td></tr> <tr><td>unclassified</td><td>4.1%</td></tr> </table>	nouns	16.3%	verbs	23.1%	adjectives	6.7%	adverbs	10.4%	pronouns	20.3%	conjunctions	2.8%	prepositions	7.5%	interjections	1.3%	articles	7.5%	unclassified	4.1%	<p>Verbal syncretism still dominates understanding, but he is beginning to show interest in isolated word meanings. In general still deals with whole sentences without analysis of words. Uses many how and why questions in response to speech of others. Perception still is realistic; first person ideation; however, becoming less concrete alludes to objects, persons, events not in immediate environment. Engages in collective monologues with other children but there is little cooperative thinking. Tells tales; talks much; threatens playmates. Counts 3 objects. Vocabulary. Mean number of words: 1540. Uses slang.</p>
nouns	16.3%																					
verbs	23.1%																					
adjectives	6.7%																					
adverbs	10.4%																					
pronouns	20.3%																					
conjunctions	2.8%																					
prepositions	7.5%																					
interjections	1.3%																					
articles	7.5%																					
unclassified	4.1%																					
<p>4.6 Phonemic gains. Appearance or stabilization of phonemes: /s-/; /g-/; /f-/; /z-/; /j-/; /tr-/; /kr-/; /t-/. Phonemes /l/, /r/, /s/, /θ/ not stabilized in any position. Reverses order of sounds within word occasionally; reflects lack of memory for bits. Speech melody. Frequently disturbs basic melody by beginning sentence with (Am) or (A). Voice well modulated and usually takes on intonational and rhythmic patterns of mother.</p>	<p>Use of complex and compound sentences increasing. Reverses syllabic and word order occasionally in sentence. Elaborates sentence by use of conjunction; makes spontaneous corrections in grammar. Mean length of response: 4.7 words.</p>	<p>Egocentric speech declining; uses more adaptive language (social communication). Verbal syncretism still dominates understanding. Employs extension of meaning in interpreting speech of others. Discrimination. Perceives differences in concrete events. Recall. Links past and present events. Vocabulary. Mean number of words: 1870. Vocabulary now reflects his linguistic culture; uses many colloquial expressions. Defines simple words. Tries to use new words; not always correctly.</p>																				

48

61

62

Development of some aspects of oral language, 3-8 years: (Cont'd)

Phonological Development	Syntactic Development	Semantic Development
<p>Phonemic gains: Articulation generally intelligible but phonemes /f/, /v/, /l/, and /s/ are not stabilized in all positions or in all contexts.</p>	<p>Grammar: Reasonably accurate; Makes many spontaneous corrections. Sentence structure expanding rapidly in accuracy and complexity. Embedding more common. Develops relative clause. Mean length of response: 4.8 words.</p>	<p>Engages in responsive discourse. Gives and receives information; change from egocentric speech to rational reciprocity. Develops percepts of number, speed, time, space. Shows inner logic in recounting plots of children's plays (television and theatre). Names and describes objects in composite pictures: Names penny, nickel, dime. Employs some imaginative thinking, but is mainly realistic. Abstraction still is meager. Categorizes concrete events on basis of likeness and difference. Vocabulary. Mean number of words: 2072. Percentage increase in vocabulary of use slight; comprehension of vocabulary increasing markedly. Defines simple words.</p>
<p>Intelligibility of speech: 89%-100%.</p>	<p>Permutations. Great gains in sentence-making of all types. Uses all basic structures. Mean length of response: 4.9 words. Grammar. Makes some errors but corrects them spontaneously.</p>	<p>Language is becoming symbolic. Significant gains in relating present and past events. Conversation is socialized in sense that listener is associated with speaker; little true collaboration of thought. Child still speaks chiefly of himself, his actions, and thoughts. Primitive argument develops; clash of unmotivated assertions. Advances in categorization and synthesis of percepts. Vocabulary. Mean number of words: 2289</p>

Development of some aspects of oral language, 3-8 years. (Cont'd.)

Phonological Development	Syntactic Development	Semantic Development																				
<p>Phonemic proficiency established in /l-/; /-l/; /-l-/; /-t-/; /-θ-/; /-r/; /-r-/; /-j-/.</p> <p>Sentence melody imitative of adults in environment.</p> <p>Child experiments with rhythmic patterns.</p> <p>Facial expression accompanying speech changes with rhythm; more varied patterns of expressions.</p>	<p>Grammatical categories. Speech is made up of:</p> <table data-bbox="500 695 722 919"> <tr><td>nouns</td><td>17.1%</td></tr> <tr><td>verbs</td><td>25%</td></tr> <tr><td>adjectives</td><td>7.6%</td></tr> <tr><td>adverbs</td><td>10%</td></tr> <tr><td>pronouns</td><td>19.2%</td></tr> <tr><td>conjunctions</td><td>2.6%</td></tr> <tr><td>prepositions</td><td>7.6%</td></tr> <tr><td>interjections</td><td>1%</td></tr> <tr><td>articles</td><td>8.3%</td></tr> <tr><td>unclassified</td><td>1.6%</td></tr> </table> <p>Sentence length and complexity develops sharply; has command of every form of sentence structure.</p> <p>Mean sentence length: 6.5 words.</p>	nouns	17.1%	verbs	25%	adjectives	7.6%	adverbs	10%	pronouns	19.2%	conjunctions	2.6%	prepositions	7.6%	interjections	1%	articles	8.3%	unclassified	1.6%	<p>Comprehension of morphemic sequences develops sharply; anticipates closure in speech of others.</p> <p>Perception and inner language make great gains; asks for explanations, motives of action, etc.</p> <p>Understands roughly differences between time intervals.</p> <p>Understands seasons of year.</p> <p>Generally distinguishes left from right in himself.</p> <p>Attempts to verbalize causal relationship.</p> <p>Counts three objects without error.</p> <p>Vocabulary. Comprehends meaning of 4000 words; uses (mean number of words): 2562 (7 years).</p>
nouns	17.1%																					
verbs	25%																					
adjectives	7.6%																					
adverbs	10%																					
pronouns	19.2%																					
conjunctions	2.6%																					
prepositions	7.6%																					
interjections	1%																					
articles	8.3%																					
unclassified	1.6%																					
<p>Phonemic proficiency established in /-z-/; /-z-/; /-ʒ-/; /-s-/; /-l-/; /-l-/; /-r-/; /-k-/.</p> <p>Speech melody. Subtle rhythms and intonational contours present.</p> <p>Facial and hand gestures underscore speech rhythms.</p> <p>Taken from: Berry, <u>Language Disorders of Children</u></p>	<p>Grammar. Chief errors now are common to his cultural environment.</p> <p>Mean length of response: 7.2 words</p>	<p>Egocentric speech has gone underground, and inner language shows marked development.</p> <p>Fluency of communication develops. Ideas shared; speech reflects understanding of causal or logical relations.</p> <p>Vocabulary. Comprehension of words races far ahead of vocabulary of use. Understands 6000-8000 words.</p> <p>Vocabulary of use: 2562 to 2818 words (7-8 years).</p>																				

A P P E N D I X E

Language & Speech Tests

Ammons Full Range Picture Vocabulary Test	Psychological Test Specialists Missoula, Montana 59801
Appraisal of Language Disturbance (ALD) (Test for Aphasia in Adults)	Northern Michigan University Marquette, Michigan 48208
Arizona Articulation Proficiency Scale (AAPS)	Western Psychological Services 12031 Wilshire Boulevard Los Angeles, California 90025
Assessment of Children's Language Com- prehension (ACLIC)	Consultant Psychological Press, Inc. 577 College Avenue Palo Alto, California 94306
Auditory Integrative Abilities Test (AIAT)	Educational Activities, Inc. Freeport, New York 11520
Auditory Memory Span for Speech Sounds (Métraux)	Appleton-Century-Crofts Division of Meredith Corp. 440 Park Ave., South New York, New York 10016
Bankson Language Screening Test	University Park Press Chamber of Commerce Bldg. Baltimore, Maryland 20202
Basic Concept Inventory (Engelmann)	Follett Educational Corporation 1010 West Washington Blvd. Chicago, Illinois 60607
Boehm Test of Basic Concepts	The Psychological Corporation 304 E. 45th Street New York, New York 10017
Boston University Speech Sound Dis- crimination	Boston University Boston, Massachusetts 02149
Bryngelson-Glaspy Articulation Test	Scott-Foresman Publishing Co. 1955 Montreal Road Tucker, Georgia 30084
Bzoch-League Receptive-Expressive Emergent Language Scale (the REEL Scale)	The Tree of Life Press 1309 N.E. 2nd Street Box 447 Gainesville, Florida 32601
Carrow Elicited Language Inventory (CELI)	Learning Concepts 2501 N. Lamar Austin, Texas 78705

NOTE: This list is not meant to be comprehensive. It is only a brief review of

Carrow Test for Auditory Comprehension of
Language (English/Spanish) (TACL)

Learning Concepts
2501 N. Lamar
Austin, Texas 78705

Comprehension of Grammar (Berry-Talbott)

M.F. Berry & R. Talbott
4332 Pine Crest Rd.
Rockford, Illinois 61107

Compton-Hutton Phonological Assessment

Carousel House
P.O. Box 4480
San Francisco, California 99101

Compton Speech and Language Screening
Evaluation

Carousel House
P.O. Box 4480
San Francisco, California 99101

Denver Developmental Screening Test

University of Colorado School
of Medicine
Denver, Colorado 81003

Detroit Test of Learning Aptitude (DTLA)

Bobbs-Merrill Book Company
Indianapolis, Indiana 46200

Developmental Sentence Scoring (DSS)

Northwestern University Press
1735 Benson Avenue
Evanston, Illinois 60201

Differentiation of Auditory Perception
Skills (DAPS)

Communication Skill Builders
P.O. Box 6081
Tucson, Arizona 85733

Florida Language Screening System (FLASC)

Educational Products Distribution
Florida Department of Education
201 W. Park Avenue
Tallahassee, Florida 32304

Fisher-Logemann Test of Articulation

Houghton-Mifflin
1900 S. Batavia
Geneva, Illinois 60134

The Goldman-Fristoe Test of Articulation

American Guidance Service, Inc.
Publishers Building
Circle Pines, Minnesota 55014

Goldman-Fristoe-Woodcock Test of
Auditory Skills Battery

American Guidance Service, Inc.
Publishers Building
Circle Pines, Minnesota 55014

Goldman-Fristoe-Woodcock Test of Auditory
Discrimination

American Guidance Service, Inc.
Publishers Building
Circle Pines, Minnesota 55014

Hannah-Gardner Preschool Language Screening Test	Joyce Publications, Inc. P.O. Box 458 Northridge, California 91324
Hejna Developmental Articulation Test	Madison Publishing Company Madison, Wisconsin 53701
Hiskey-Nebraska Test of Learning Aptitude	University of Nebraska 5640 Baldwin Lincoln, Nebraska 68301
Houston Test for Language Development (Crabtree)	The Houston Test Company Box 33152 Houston, Texas 77001
Illinois Children's Language Assessment Test (ICLAT)	The Interstate Printers and Publishers, Inc. Danville, Illinois 61832
Illinois Test of Psycholinguistic Abilities (ITPA)	University of Illinois Press Urbana, Illinois 61801
Iowa Pressure Articulation Test	Bureau of Educational Research and Service Extension Division State University of Iowa Iowa City, Iowa 52240
Language and Speech Screening Test (LAST)	Department of Communicative Disorders University of Mississippi University, Mississippi 38677
Language Sampling, Analysis and Training	Consulting Psychological Press, Inc. 577 College Avenue Palo Alto, California 94306
Lindamood Auditory Conceptualization (LAC)	Teaching Resources Corporation 100 Boylston Street Boston, Massachusetts 02116
Laradon Articulation Scale (Edmonston)	Western Psychological Services 12031 Wilshire Blvd. Los Angeles, California 90025
McDonald Deep Test of Articulation	Starwix House, Inc. 3020 Chartiers Avenue Pittsburgh, Pennsylvania 14204
Michigan Picture Language Inventory	W. Woldki University of Michigan Ann Arbor, Michigan 48104

Miller-Yoder Test of Grammatical Com-
prehension

University of Wisconsin Bookstore
Madison, Wisconsin 53706

Minnesota Test for Differential Diagnosis
of Aphasia

University of Minnesota Press
2037 University Avenue, SE
Minneapolis, Minnesota 55455

Northwestern Syntax Screening Text (NSST)

Northwestern University Press
1735 Benson Avenue
Evanston, Illinois 60020

Oral Language Sentence Imitation
Diagnostic Inventory (OLSIDI)

Lingui System, Inc.
Suite 108
1630 Fifth Avenue
Moline, Illinois 61265

Oral Language Sentence Imitation Screening
Test (OLSIST)

Lingui System, Inc.
Suite 108
1630 Fifth Avenue
Moline, Illinois 61265

Palst Screening Text (Articulation and
Language)

Word Making Productions, Inc.
Box 1858
Salt Lake City, Utah 84110

Peabody Picture Vocabulary Test (PPVT)

American Guidance Service
Publisher's Building
Circle Pines, Minnesota 55014

Photo Articulation Test (PAT)

The Interstate Printers &
Publishers
Danville, Illinois 61832

Picture Speech Discrimination Test
(Mecham and Jex)

Brigham Young University Press
Provo, Utah 84601

Picture Story Language Test (Myklebust)

Western Psychological Services
12031 Wilshire Blvd.
Los Angeles, California 90025

Predictive Screening Test of Articulation
(Van Riper and Erickson)

Continuing Education Office
Western Michigan University
Kalamazoo, Michigan 49001

Preschool Language Scale (Zimmerman)

Charles E. Merrill Publishers
Corporation
1300 Alum Creek Drive
Columbus, Ohio 43216

Ray Auditory Learning Test (E. Taylor)

Harvard University
Cambridge, Massachusetts

Riley Articulation and Language Test	Westerr: Psychological Services 12031 Wilshire Blvd. Los Angeles, California 90025
Screening Tests for Identifying Children with Specific Language Disability (Slingerland)	Educators Publishing Service 75 Moulton Street Cambridge, Massachusetts 02138
Sequenced Inventory of Communication Development (SICD)	University of Washington Press Seattle, Washington 98105
Structured Photographic Language Test	Janelle Publications P.O. Box 12 Sandwich, Illinois 60548
Templin Sound Discrimination Test	University of Minnesota Press 2037 University Avenue Minneapolis, Minnesota 55455
Test of Language Development (TOLD)	Pro-Ed 333 Perry Brooks Bldg. Austin, Texas 78701
Test of Non-verbal Discrimination (TENVAD)	Follott Educational Corporation 1010 W. Washington Blvd. Chicago, Illinois 60607
Tree/Bee Test of Auditory Discrimination	Academic Therapy Publications P.O. Box 899 San Rafael, California 94901
Utah Test of Language Development (UTLD)	Communication Research Associates P.O. Box 11012 Salt Lake City, Utah 84111
Verbal Language Development Scale (Mecham)	American Guidance Service Publishers Building Circle Pines, Minnesota 55014
Visco Tests of Auditory Perception (VI-TAPS)	Educational Activities, Inc. Freeport, New York 11520
Vocabulary Comprehension Scale (Bangs)	Learning Concepts 2501 N. Lamar Austin, Texas 78705
Washington Speech Sound Discrimination Test	The Interstate Printers & Publishers, Inc. Lanville, Illinois 61832
Weppan Auditory Discrimination Test	Language Research Association 300 N. State Street Chicago, Illinois 60610

A P P E N D I X F

Language Assessment Outline

Language Profile

RECEPTIVE

EXPRESSIVE

I. Language Content & Semantics

- A. Concepts: categories and relationships
- B. Vocabulary: labels
- C. Communicativeness: ability to show appropriate understanding of meaning.

I. Language Content & Semantics

- A. Concepts
- B. Vocabulary
- C. Communicativeness: ability to show (display) appropriate meaning

II. Suprasegmental Features: nonverbal

- A. Intonation
- B. Gesture
- C. Emotion: ability to understand emotional content by nonverbal means

II. Suprasegmental Features

- A. Intonation
- B. Gesture
- C. Emotion: ability to show emotional content by nonverbal means

III. Verbal Language Structure

- A. Phonology: study of sounds and sound sequences
- B. Morphology: smallest meaningful unit of sound
- C. Syntax: processes which relates underlying meaning and surface structures

III. Verbal Language Structure

- A. Phonology
- B. Morphology
- C. Syntax

IV. Processing Variables

- A. Visual
 - 1. Attention: the ability to focus on stimuli
 - 2. Perception: the ability to gain meaning
 - 3. Discrimination: the ability to see relationships
 - 4. Memory: the ability to order and remember sequences
- B. Auditory
 - 1. Attention
 - 2. Perception
 - 3. Discrimination
 - 4. Memory
- D. Tactile Kinesthetic
 - 1. Attention
 - 2. Perception
 - 3. Discrimination
 - 4. Memory

IV. Processing Variables

- C. Motor
 - 1. Gross
 - 2. Fine
 - 3. Perceptual-Motor

* * * * *

Source: This outline was prepared by Patricia Hill as part of a course requirement for Dr. E. C. Hutchinson at the University of Florida (1975).

V. Task Variables

- A. Stimulus Materials: what is used to gain the desired response?
- B. Response Form: what type of response is required?
- C. Reinforcement: what type of reinforcement were tried?
- D. Reinforcement Results: which reinforcements were effective?

VI. Situational Variables

- A. Physical Environment: physical environment to test area
- B. Examiner-Client Status: working relationship
- C. Client Status: any physical anomalies?
- D. Code Differences: bilingual, bidialectical

VII Behavioral Observations

RECEPTIVE FUNCTIONS

I. Language Content/Semantics

A. Concepts

Boehm Test of Basic Concepts
Engelmann Basic Concept Inventory
ITPA Auditory and Visual Association Subtest

B. Vocabulary

Peabody Picture Vocabulary Test
Peabody Individual Achievement Test (Visual)
Michigan Picture Language Inventory
Full-Range Picture Vocabulary Test (Ammons)
Utah Test of Language Development
Gates-MacGinitie Reading Test

C. Communicativeness

Subjective Evaluation

II. Suprasegmental Features

Subjective Evaluation for all features

III. Language Structure

A. Phonology

Wepman Test of Auditory Discrimination
Boston University Auditory Discrimination Test
Goldman-Fristow-Woodcock Test of Auditory Discrimination

B. Morphology

Northwestern Syntax Screening Test
Carrow Test for Auditory Comprehension of Language
Michigan Picture Language Inventory

C. Syntax

Northwestern Syntax Screening Test
Carrow Test for Auditory Comprehension of Language

IV. Processing Variables

A. Visual

1. Attention

ITPA Visual Reception Subtest
Detroit Tests of Learning Aptitude
Subjective evaluation

2. Perception

Frostig Developmental Test of Visual Perception
Ayres Space Test
Detroit Test of Learning Aptitude Visual Absurdities Subtest
French Pictorial Test of Intelligence
Hiskey-Nebraska Test of Learning Aptitude Picture
Identification Subtest
Leiter International Performance Scale
Merrill-Palmer Scale of Mental Tests
Southern California Sensory Integration Tests
Wechsler Intelligence Scale for Children
Minnesota Preschool Scale

3. Discrimination

ITPA Visual Closure Subtest
Frostig Developmental Test of Visual Perception
Hiskey-Nebraska Test of Learning
Aptitude Bead Pattern Subtest
Columbia Mental Maturity Scale
Leiter International Performance Scale
Minnesota Preschool Scale
Wechsler Intelligence Scale for Children
Detroit Test of Learning Aptitude
Ayres Southern California Figure-Ground Test
Haeusserman Educational Evaluation of Preschool Children
Merrill-Palmer Scale of Mental Tests
French Pictorial Test of Intelligence-Form Discrimination

4. Memory

Ayres Southern California Sensory Integration Tests
Haeusserman Educational Evaluation of Preschool Children
French Pictorial Test of Intelligence-Immediate Recall
Leiter International Performance Scale
Detroit Tests of Learning Aptitude
Memory for Designs Test

B. Auditory

1. Attention

Detroit Tests of Learning Aptitude
Subjective evaluation

2. Perception

ITPA Auditory Reception Subtest
Haeusserman Educational Evaluation of Preschool Children
Screening Test for Auditory Perception

3. Discrimination

Goldman-Fristoe-Woodcock Test of Auditory Discrimination
Wepman Test of Auditory Discrimination
Boston University Auditory Discrimination Test
Haeusserman Educational Evaluation of Preschool Children

4. Memory

ITPA Auditory Sequential Memory Subtest
Utah Test of Language Development-Digit Span, Sentence Repetition
Carrow Elicited Language Inventory
Haeusserman Educational Evaluation of Preschool Children
Detroit Tests of Learning Aptitude
Minnesota Prescale Scale

C. Tactile-Kinesthetic

1. Attention

Subjective evaluation

2. Perception

Ayres Southern Ca. Kinesthesia & Tactile Perception Test

3. Discrimination

Satz Finger Localization Test
Ayres Southern Ca. Kinesthesia & Tactile Perception Test

4. Memory

Ayres Southern Ca. Kinesthesia & Tactile Perception Test
Graphesthesia Subtest

EXPRESSIVE FUNCTIONS

I. Language Content/Semantics

A. Concepts

Wechsler Intelligence Scale for Children
Minnesota Preschool Scale
Detroit Tests of Learning Aptitude
Peabody Individual Achievement Test
Haeusserman Educational Evaluation of Preschool Children
Picture Story Language Test (Graphic)

B. Vocabulary

Minnesota Preschool Scale
Michigan Picture Language Inventory
Haeusserman Educational Evaluation of Preschool Children
Detroit Tests of Learning Aptitude
Type-Token Ratio
Picture Story Language Test (Graphic)
Wechsler Intelligence Scale for Children

C. Communicativeness

Subjective evaluation

II. Suprasegmental Features

Subjective evaluation for all features

III. Language Structure

A. Phonology

Fischer-Logemann Test of Articulation Competence
Arizona Articulation Proficiency Scale
Templin-Darley Articulation Test
Laradon Articulation Scale
Henja Developmental Articulation Test
Goldman-Fristoe Articulation Test
Photo Articulation Test
Articulation Survey Sentences
Bzoch Error Pattern Diagnostic Articulation Test
McDonald Screening and Deep Tests of Articulation
Van Riper Predictive Screening Test of Articulation

B. Morphology

Berko Test of English Morphology
Michigan Picture Language Inventory
Northwestern Syntax Screening Test
Developmental Sentence Scoring
Carrow Elicited Language Inventory
Applied Linguistic Analysis (Hannah)
ITPA Grammatic Closure Test
Picture Story Language Test (Graphic)

C. Syntax

Northwestern Syntax Screening Test
Developmental Sentence Scoring
Carrow Elicited Language Inventory
Applied Linguistic Analysis (Hannah)
Michigan Picture Language Inventory
Picture Story Language Test (Graphic)

IV. Processing Variables

C. Motor

1. Gross

Oseretsky Test of Motor Proficiency

2. Fine

Oseretsky Test of Motor Proficiency
Hiskey-Nebraska Test of Learning Aptitude Bead
Pattern Subtest
Frostig Developmental Test of Visual Perception
Minnesota Preschool Scale
Ayres Southern Ca. Sensory Integration Tests

3. Perception

Hiskey-Nebraska Test of Learning Aptitude Bead
Pattern and Paper Folding Subtests
Ayres Southern Calif. Kinesthesia & Tactile Perception Test
Frostig Developmental Test of Visual Perception
Wechsler Intelligence Scale for Children
Bender Visual Motor Gestalt Test
Detroit Tests of Learning Aptitude
Memory for Designs Test
Minnesota Preschool Scale

OTHER VARIABLES, FUNCTIONS, OBSERVATIONS, ETC.

V. Task Variables

- A. Stimulus Materials
- B. Response Form
- C. Reinforcement
- D. Reinforcement Results

VI. Situational Variables

- A. Physical Environment
- B. Examiner-Client Status (Working relationship)
- C. Client Status (Physical)
- D. Code Differences (Dialect)

VII. Behavioral Observations

V, VI, AND VII require descriptive information and/or subjective evaluation

Include Method of Measurement and Results

SCORE SHEET

RECEPTIVE

EXPRESSIVE

I. Language Content and Semantics

I. Language Content and Semantics

A. Concepts _____

A. Concepts _____

B. Vocabulary _____

B. Vocabulary _____

II. Suprasegmental Features

II. Suprasegmental Features

A. Intonation _____

A. Intonation _____

B. Gesture _____

B. Gesture _____

C. Emotion _____

C. Emotion _____

III. Verbal Language Structure

III. Verbal Language Structure

A. Phonology _____

A. Phonology _____

B. Morphology _____

B. Morphology _____

C. Syntax _____

C. Syntax _____

IV. Processing Variables

IV. Processing Variables

A. Visual

1. Attention _____

2. Perception _____

3. Discrimination _____

4. Memory _____

B. Auditory

1. Attention _____

2. Perception _____

3. Discrimination _____

C. Memory _____

C. Motor

1. Gross _____

2. Fine _____

3. Perceptual Motor _____

D. Tactile Kinesthetic

1. Attention _____

2. Perception _____

3. Discrimination _____

4. Memory _____

V. Task Variables

- A. Stimulus Materials _____
- B. Response Form _____
- C. Reinforcement _____
- D. Reinforcement Results _____

VI. Situational Variables

- A. Physical Environment _____
- B. Examiner - Client Status _____
- C. Client Status _____
- D. Code Differences _____

VII. Behavioral Observations:

A P P E N D I X 6

LANGUAGE SAMPLING, ANALYSIS, AND TRAINING PROCEDURES

Based on: Slobin, D. (Ed.). A Field Manual for Cross-Cultural Study of the Acquisition of Communicative Competence. Univ. of California Press, 1967.

INSTRUCTIONS FOR COUNTING WORDS AND MORPHEMES

I. Procedure

- A. Number the sentences to be analyzed (see III, below).
- B. For each sentence, enter the number of words and morphemes to the left of the sentence.
- C. Circle affixes in red.
- D. Cross out (lightly) any sentence or word to be excluded.
- E. For each sentence, classify the construction type and write it above the sentence.
- F. Circle substitutions in red.
- G. Checkmark omissions in red.

II. General rule:

- A. Beginnings and endings of sentences are usually clear from children's use of intonation and pause.

III. Specific rules:

- A. Include sentences of two or more morphemes (e.g. Include: the ball.; Landed.; Boxes. Exclude: Ball., Lande., Box.)
- B. Omit unintelligible sentences.
- C. Count an unintelligible word as one word, one morpheme, if all the rest of the sentence is clear.
- D. Don't count false starts:
e.g.,
"A boy... (child changes his mind)...
The girl is writing." Don't count "A boy".
- E. If a child gets part way through a sentence, but doesn't complete it, give credit for what he said:
e.g.,
"The boy is jumping over the... "I don't know what that is."
Count as two sentences.
- F. Omit fillers: "um", "er", etc.
- G. Count no, yeah, only if within a sentence:
e.g.,
a) "No, I don't wanna." Don't count "no".
b) "No want to." Count "no".
- H. If a child uses a stereotyped starter repeatedly for a series of sentences (e.g., It's a ---, or That's a ---, or There's a ---), count the first occurrence in its entirety. Thereafter, count the

starter from the count, and count only the remainder of the sentence (if the remainder is only one word--one morpheme, then that sentence will be omitted).

e.g.,

- 3-4 That's a dog
- 1-1 That's a man - counted
- 2-2 That's a big house - count "big house"

- I. Count a noun compound as one word, one morpheme, unless independent use of either element is found elsewhere.

e.g.,

"Space man": If "man" or "space" appeared in another sentence (e.g., space ship) then "Space man" counts as one word, two morphemes. Whether a compound is written as one or two words is irrelevant. The stress pattern is the decisive factor. A noun compound is distinguished from a noun phrase by the stress patterns on the elements:

e.g.,

- a) A sail boat (loud-soft) noun compound
- b) A white sail (soft-loud) noun phrase

- J. Exclude exact repetitions.

- K. Exclude spontaneous imitations.

- L. Count contractions as one word, two morphemes:

e.g.,

can't, he's, I'll: count as one word, 2 morphemes
hafta, gonna, wanna, gotta: count as one word, one morpheme

- M. Series of nouns or verbs

1. Count words in series as separate sentences (in response to one picture) if intonation and pause patterns so indicate:

e.g.,

- a. Ball. Dog. Man.
(three sentences, one word, one morpheme each).
- b. A ball. A dog. A man.
(three sentences, two words, two morphemes each).

2. Count words in series as one sentence (in response to one picture) if intonation and pause patterns so indicate:

e.g.,

Ball dog. (rising intonation on ball, no pause between ball and dog; one sentence, two words, two morphemes).

Some children build rambling sentences by repeating series of noun phrases; thus making these sentences deceptively long, and unrepresentative of the sample as a whole.

e.g.,

I see a dog and a house and a car and a wagon and a

A P P E N D I X H

Rules for calculating mean length of utterance and upper bound.
from: Roger Brown, A First Language, 1973
Harvard Univ. Press

1. Only fully transcribed utterances are used; none with blanks. Portions of utterances, entered in parentheses to indicate doubtful transcription, are used.
2. Include all exact utterance repetitions. Stuttering is marked as repeated efforts at a single word; count the word once in the most complete form produced. In the few cases where a word is produced for emphasis of the like (no, no, no) count each occurrence.
3. Do not count such fillers as /mm/ or /oh/, but do count /no/, /yeah/, and /hi/.
4. All compound words (two or more free morphemes), proper names, and ritualized reduplications count as single words. Examples: /birthday/, /rackety-boom/, /choo-choo/, /quack-quack/, /night-night/, /pocket-book/, /see saw/. Justification is that there is no evidence that the constituent morphemes function as such for these children.
5. Count as one morpheme all irregular parts of the verb (go, did, went, etc.). Justification is that there is no evidence that the child relates these to present forms.
6. Count as one morpheme all diminutives (doggie, mommie) because these children at least do not seem to use the suffix productively. Diminutives are the standard forms used by the child.
7. Count as separate morphemes all auxiliaries (is, have, will, can, must, would). Also all catenatives: gonna, wanna, hafta. These latter are counted as single morphemes rather than as /going to/ or /want to/ since evidence is that they function so for the children.
8. Count as separate morphemes all inflections, for example, possessive /s/, plural /s/, third person singular /s/, regular past /d/, progressive /-ing/.
9. The range count follows the above rules but is always calculated for the total transcription rather than for 100 utterances.

"These rules take account of things we learned about child speech in the first year of the study; for example, the fact that compound words are not analyzed as such and the fact that the irregular pasts that occur early are not used with semantic consistency or contrasted with present forms. Still no claim can be made that these are just the right rules. They have, however, served all of us well as a simple way of making one child's data comparable with another's, one project with another, and in limited degree, development in one language comparable with development in another."

APPENDIX I

Stuttering Severity Instrument
Glyndon D. Riley*

G-2

Name _____ Age _____ Sex _____ Speech Pathologist _____

Date _____

Frequency (Use A or B, not both)

A: For readers. Use 1 and 2.		B: For nonreaders				
1. Job Task	2. Reading Task	Picture Task				
Per-centage	Task Score	Per-centage	Task Score	Per-centage	Task Score	
1	1	1	2	1	4	
2-3	3	2-3	2	2-3	6	
4	4	4-5	5	4	8	
5-6	5	6-9	6	5-6	10	Total
7-9	6	10-16	7	7-9	12	Frequency
10-14	7	17-26	8	10-14	14	Score
15-28	8	27 and up	9	15-28	16	A 1 & 2
29 and up	9			29 and up	18	or
						B

Duration

Estimated Length of Three Longest Blocks	Task Score	
Fleeting	1	
One half second	2	
One full second	3	
2 to 9 seconds	4	Total Duration
10 to 30 seconds (by second hand)	5	Score
30 to 60 seconds	6	
More than 60 seconds	7	

Physical Concomitants

Evaluating Scale: 0-none; 1 not noticeable unless looking for it; 2-barely noticeable to casual observer; 3-distracting; 4-very distracting; 5-severe and painful looking.

1. Distracting Sounds. Noisy breathing, whistling, sniffing, blowing, clicking sounds 0 1 2 3 4 5
2. Facial grimaces. Jaw jerking, tongue protruding, lip pressing, jaw muscles tense 0 1 2 3 4 5
3. Head movement. Back, forward, turning away, poor eye contact, constant looking around 0 1 2 3 4 5
4. Extremities movement. Arm and hand movement, hand about face, torso movement, leg movements, foot tapping or swinging 0 1 2 3 4 5

Total Physical Concomitant Score

Interpretation of Results:

- 0-5 very mild
- 6-15 mild
- 15-25 moderate

Total Overall Score

A P P E N D I X J

Sample Forms

VOICE PROFILE

Name _____ Age _____ B: D: _____

Grade _____ Sex _____ Date _____

How long has the problem existed? _____ Voice Rating: 1 2 3 4 5 6 7

In what situations is the voice better or worse? _____ Constant _____

_____ Variable _____

Length of sustained "ah" _____

	LARYNGEAL CAVITY	RESONATING CAVITY	INTENSITY
	PITCH	NASALITY	
	high	hypernasal	-2 1 +2
	B	C	soft loud
	+3	+4	
	+2	+3	
		+2	VOCAL RANGE
A open	-4 -3 -2 1 +2 +3 closed	1	
	-2	-2	-2 1 +2
	-3	hyponasal	monotone variable pitch
	low		

Comments: _____

Examiner: _____

Marking System

Primary Feature
 Secondary Feature
 Noted Feature
 Intermittent Feature

VOICE EVALUATION

Pitch	Laryngeal Opening	Resonance	Vocal Range	Comments
+3 socially demeaning	+3 inability to sustain ongoing phonation	+4 hypernasal +3 vowels nasalized	+2 variable 1 normal	
+2 high	+2 tense	+2 assimilated	-2 monotone	
1 normal	1 normal	1 normal		
-2 low	-2 breathy	-2 denasal		
-3 socially demeaning	-3 whisper -4 inability to achieve laryngeal constriction			

A P P E N D I X - K

Services to severely and profoundly re- tarded students in the public school setting.

Philosophically it is held that the severely or profoundly retarded person has the right to be able to relate as much as possible to his environment. We must recognize that this ability to relate is dependent upon development of cognitive skills (inner language). Receptive language and a possible mode of expressive language may come later.

The speech-language pathologist serving severely and profoundly retarded students in the public school setting may best be used on a consultative basis with the following responsibilities:

1. Evaluation of each student's cognitive, receptive and expressive language skills.
2. Development of instructional objectives to be incorporated in the educational plan implemented by the classroom teacher.
3. Recommendation of materials and methods to be used by the teacher and aides in achieving the objectives.
4. Reevaluation of each student's progress and adjustment of objectives on a regular basis.
5. Teacher training.
6. Training of aides in the classroom setting.
7. Parent education.
8. Ongoing supervision of the language development process in the classroom.

Professional judgement should dictate the amount and type of possible direct clinical intervention by the speech-language pathologist.

The following is a partial bibliography of programs and methods which may be applicable to severely and profoundly retarded students:

1. A Coordinated Inquiry into Program Effectiveness for the Development of Verbal Imitation Skills and Associated Behaviors of Institutionalized Profoundly Mentally Retarded Adults
Speech and Hearing Dept.,
Pennhurst State School
and Hospital
Spring City, PA. 19475
2. A Language Development Curriculum Guide for Use With the Profoundly Retarded
Ft. Myers Sunland
Development Center
Ft. Myers, Fl. 33902

3. A Language Intervention Program
For Developmentally Young Children
University of Miami
Mailman Center for Child
Development
4. A Language Intervention Strategy for Non-
Language M/R Children
Awbury School
6015 Boyer
Philadelphia, PA 19119
5. A Language Training Program for
Nonverbal Autistic Children
Ira Allen School
Fletcher Place
Burlington, Vermont 05401
6. A Program Development and Evaluation
Methodology for the Delivery of Group
Instruction to Institutional Retardation
Programmed Activities Center
for Education
Beatrice State Home
Beatrice, Nebraska 68310
7. Adult Activities Program, Bureau
of Day Training
337 S. Harrison Street
East Orange, N.J. 07019
8. An Interdisciplinary Language
Intervention Program
Univ. of Tennessee Book
and Supply Store,
UI Center
Knoxville, Tennessee 37916
9. An Ontogenic Language Teaching Strategy
for Retarded Children
Dept. of Communication
Disorders
University of Wisconsin 53706
10. APT: A Training Program for Citizens
with Severely/Profoundly Retarded
Behavior
Pennhurst State School
Spring City, Penn. 17005
11. Beatrice State Home Manual Communication
Training Program
Box 808
Beatrice, Nebraska 68310
12. Beginning Speech (READ Project)
Read House
Harvard University
Cambridge, Mass. 02138
13. BKR Educational Projects, Inc.
9025 48th Terrace
Miami, Florida
14. "Communicaid"
FWSH & TC
801 E. State Blvd.
Ft. Wayne, Indiana 46803
15. Communication and Training Center Program
(TC Program)
56 Perry Hill Estates
West Willington,
Connecticut 06279
16. Communication Stimulation Program
C/O Overbottom Developmental
Center

- | | | |
|-----|--|--|
| 17. | Communication Training Program
for the Profoundly and Severely
Mentally Retarded | Northern Wisconsin Colony
and Training School
Box 340
Chippewa Falls, Wisc. 54729 |
| 18. | Cranston Center Program | Cranston Center for Retarded
Citizens
665 Dyer Avenue
Cranston, R.I. 02920 |
| 19. | Developmental Programming for Infants
& Young Children (3 Vol. set) | Univ. of Michigan Press
Ann Arbor, Michigan |
| 20. | Dormi Language Program | Denton State School
P.O. Box 368
Denton, Texas 76202 |
| 21. | Functional Speech and Language Training
for the Severely Handicapped | H. & H. Enterprises, Inc.
Box 3342
Lawrence, Kansas 66044 |
| 22. | Gesture Language Training Program | Denton State School
P.O. Box 368
Denton, Texas 76202 |
| 23. | Haven School Program | Haven School
11300 S.W. 80th Terrace
Miami, Fl. 33173 |
| 24. | How to Use Behavior Modification With
Mentally Retarded and Autistic Children | BMT, Inc.
Box 598
Libertyville, Ill. 6048 |
| 25. | Instructional Materials for the Handicapped
Birth through Early Childhood | Olympus Publishing Company
1670 E. 13th Street
Salt Lake City, Utah 84105 |
| 26. | Karnes Early Language Activities | CEM
P.O. Box 233 9 Station A
Champaign, Ill. 61820 |
| 27. | Language Development-Perceptual Motor
Training Program | Muskegon Development Center
1903 Marquette
Muskegon, Mich. 49442 |
| 28. | Language Development Program | Arizona Training Program
Randolf, Arizona 85228 |
| 29. | Learning Accomplishment Profile | Kaplan School Supply
600 Jonestown Rd.
Winston-Salem, N.C. 27103 |
| 30. | Manual Language for the Child Without | CMR Developmental Team |

- | | |
|--|--|
| 31. Mealtime Speech Therapy Program | Celeste Beard
Pacific State Hospital
Pamona, CA. 91766 |
| 32. Modesto Program for Speech and Language Disabilities | Mississippi Univ. for
Women
Speech & Hearing Center
Columbus, Miss. 39701 |
| 33. Monterey Language Program | Monterey Learning Systems
900 Welch Road
Palo Alto, Cal. 94304 |
| 34. Murray Ridge Sensory Motor Program | Lorain County Board of
Mental Retardation
9750 S. Murray Ridge Rd.
Elyria, Ohio 44035 |
| 35. Non-Speech Language Initiation Program | H. & H. Enterprises, Inc.
Box 3342
Lawrence, Kansas 66044 |
| 36. One Step At A Time Curriculum Guide
for Louisiana Adaptive Behavior Scale | Day Developmental Training
Services
P.O. Box 44215
Baton Rouge, Louisiana 70804 |
| 37. Programmed Lessons for Young Language Dis-
abled Children | Charles C. Thomas
301-327 E. Lawrence Ave.
Springfield, ILL |
| 38. Project SMILE | Behavior Therapy
Custer State Hospital
Custer, South Dakota 57730 |
| 39. Ready, Set, Go: Training Programs for
Use by Parents and Paraprofessionals with
Non-Verbal and Minimally Verbal Children | The Nisoner Center
Ohio State University
1582 Cannon Drive
Columbus, Ohio 43210 |
| 40. Santa Cruz Behavioral Characteristics
Progression | Vort Corporation
385 Sherman Avenue
Palo Alto, Cal. 94306 |
| 41. School for Multi-Handicapped Curriculum | School for Multi-Handicapped
101 North Grape
Medford, Oregon 97501 |
| 42. Short Language Experiences | Greenknoll School
410 S. East Street
Lebanon, Ohio 45036 |

43. Sign Communication for the Non-Verbal
Mentally Handicapped
North Wisconsin Colony
and Training School
Box 340
Chippewa Falls, Wisc. 54729
44. Speech and Language Training Program
for Developmentally Disabled Children
Department of Special
Education
220 S.E. 102nd Avenue
Portland, Oregon 92733
45. Strategies for Individualized Language
Programs
Experimental Educational Unit
W-J10
University of Washington
Seattle, Washington 98105
46. Teaching the Moderately and Severely Handi-
capped (3 Vol. set)
University Park Press
Chambers of Commerce Bldg.
Baltimore, MD 21202
47. The Teaching Research Curriculum
for Moderately and Severely Handicapped
Charles C. Thomas
301-327 E. Lawrence Ave.
Springfield, ILL
48. Visually Cued Language Cards
Consulting Psychologists
Press
577 College Avenue
Palo Alto, Cal. 94300
49. W.A. Howe Communication Program Levels 1,
2, 3, 4, and 5
W.A. Howe Total Communication Program
W.A. Howe Development Center
7600 W. 183rd
Tinley Park, Ill. 60477

CHILD'S NAME: _____

OBSERVER: _____

DATE BEGUN: _____

SPECIFIC BEHAVIOR PINPOINTED: _____

DATE _____ NUMBER OF TIMES BEHAVIOR HAPPENS EACH DAY _____

DAILY TOTALS _____

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

SPECIFIC OPPOSITE BEHAVIOR: _____

TIME OF OBSERVATION(S): _____

GRAND TOTAL _____



State of Florida
Department of Education
Tallahassee, Florida
Ralph D. Turlington, Commissioner
Affirmative action/equal
opportunity employer

FLORIDA: A STATE OF EDUCATIONAL DISTINCTION. "On a statewide average, educational achievement in the State of Florida will equal that of the upper quartile of states within five years, as indicated by commonly accepted criteria of attainment."

Adopted, State Board of Education, Jan. 20, 1981