

DOCUMENT RESUME

ED 208 635

EC 140 091

TITLE Hearing Impaired: Resource Manuals for Program for Exceptional Children. Volume IX.  
INSTITUTION Georgia State Dept. of Education, Atlanta, Office of Instructional Services.  
PUB DATE 81  
NOTE 95p.; For other volumes in the series, see EC 140 083-092.  
EDRS PRICE MF01/PC04 Plus Postage.  
DESCRIPTORS Definitions; Delivery Systems; \*Due Process; Elementary Secondary Education; Eligibility; \*Hearing Impairments; \*Program Design; \*Program Evaluation; State Standards  
IDENTIFIERS Georgia

ABSTRACT

The manual provides resource information on eight topics related to teaching hearing impaired students in Georgia (sample subtopics in parentheses): definitions; eligibility criteria; due process (screening, referral, confidentiality); program organization (philosophy, personnel, facilities); instructional programs (suggested curriculum guides); program evaluation (eligibility, program management, instructional programs); additional resources (directories, associations); and state schools. (CL)

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

This document has been reproduced as  
received from the person or organization  
originating it

Minor changes have been made to improve  
reproduction quality

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

ED 208635

# Volume IX

# Hearing Impaired

## Resource Manuals For Program For Exceptional Children

PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*A. Moughon*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

Office of Instructional Services  
Division of Special Programs  
Program for Exceptional Children  
Georgia Department of Education  
Atlanta, Georgia 30334

Charles McDaniel  
State Superintendent of Schools  
1981

ED 208635

## Foreword

Georgia is committed to the belief that every exceptional child has a right to receive an education based on his or her individual needs.

The need for developing standards and guidelines for comprehensive programs for exceptional children in our schools has emerged from state and federal legislation. The three major laws affecting the education of exceptional children in Georgia follow.

### **Adequate Program for Education in Georgia Act (APEG) Section 32-605a, Special Education**

*"All children and youth who are eligible for the general education program, preschool education, or who have special educational needs and three and four year old children who are either physically, mentally or emotionally handicapped or perceptually or linguistically deficient shall also be eligible for special education services. Children, ages 0-5 years, whose handicap is so severe as to necessitate early education intervention may be eligible for special education services."*

Effective date: July 1, 1977

### **P.L. 94-142, Education for All Handicapped Children Act of 1975**

The full services goal in Georgia for implementation of P.L. 94-142 states:

*"All handicapped children ages 5-18 will have available to them on or before September 1, 1978, a free appropriate education. Ages 3-4 and 19-21 will be provided services by September 1, 1980, and 0-2 by September 1, 1982, if funds are available."*

Effective date: September 1, 1978

### **Section 504 of P.L. 93-112, The Vocational Rehabilitation Act of 1973**

*"No otherwise qualified handicapped individual shall solely by the reason of his, her handicap be excluded from the participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance."*

Effective date: June 1, 1977

The purpose of the *Resource Manuals for Programs for Exceptional Children* is to help local education agencies implement these laws and provide quality programs for exceptional children.

## Acknowledgements

This resource manual could not have been published without the help of many professionals who work in the area of the hearing impaired. These individuals along with the Resource Manual Committee contributed many hours researching materials, exchanging ideas, writing and editing this manual. All professional assistance given in the development of this publication is gratefully acknowledged.

### Resource Manual Committee

Chairperson: Ishmael C. Childs  
Consultant, Audiology/Hearing Impaired  
Georgia Department of Education  
Program for Exceptional Children

Lolan Williams  
Teacher of the Hearing Impaired  
Glynn County Schools  
Brunswick, Ga. 31520

Cookie Beason  
Teacher of the Hearing Impaired  
Wayne County Schools  
555 S. Sunset Blvd.  
Jesup, Ga. 32545

Nan Freeman  
Lead Teacher of the Hearing Impaired  
Bibb County Schools  
2064 Vineville Ave.  
Macon, Ga. 31208

Max Frick  
Psychologist  
Atlanta Area School for the Deaf  
890 N. Indian Creek Dr.  
Clarkston, Ga. 30021

Gail Meecham  
Coordinator, Program for the Hearing Impaired  
Cobb County Schools  
47 Waddell St.  
Marietta, Ga. 30061

Annette Moore  
Teacher of the Hearing Impaired  
Atlanta Area School for the Deaf  
890 N. Indian Creek Dr.  
Clarkston, Ga. 30021

Wilma Owens  
Middle School Supervisor  
Georgia School for the Deaf  
Cave Spring, Ga. 30124

Dr. Richard Talbot  
Assistant Professor-Audiology/Hearing Impaired  
University of Georgia  
570 Adenhold Hall  
Athens, Ga. 30602

Cheryl Valentine  
Speech and Language Pathologist  
Wilkerson County Schools  
Irwinton, Ga. 32042

## Table of Contents

Foreword .....	iii
Acknowledgements .....	iv
<b>I. DEFINITIONS .....</b>	<b>1</b>
Types of Hearing Loss .....	2
<b>II. ELIGIBILITY CRITERIA .....</b>	<b>3</b>
Audiological and Otological Assessment .....	4
<b>III. DUE PROCESS .....</b>	<b>7</b>
Introduction .....	8
Screening .....	9
Referral .....	9
Comprehensive Evaluation .....	9
Individualized Education Program (IEP) .....	10
Placement .....	11
Confidentiality .....	11
Exit Criteria .....	11
<b>IV. PROGRAM ORGANIZATION .....</b>	<b>13</b>
Philosophy .....	14
Delivery Model .....	14
Self-contained Class .....	14
Resource Room .....	15
Itinerant Services .....	15
Personnel .....	15
LEA Administration .....	15
Supervisor .....	16
Lead Teacher .....	16
Hearing Impaired Teacher .....	17
Resource/Itinerant .....	17
In-service .....	18
Facilities .....	19
Facilities Checklist .....	20
<b>V. INSTRUCTIONAL PROGRAMS .....</b>	<b>21</b>
Direct Service Objectives .....	22
Suggested Curriculum Guides .....	22
Parent-Infant .....	22
Preschool .....	22
Primary .....	23
Elementary .....	24
Suggested Material and Equipment .....	26
Self-contained .....	26
Resource Room .....	27
Itinerant .....	27
Professional Resources .....	27
Related Services .....	33
<b>VI. PROGRAM EVALUATION .....</b>	<b>35</b>
Eligibility .....	36
Due Process .....	36
Comprehensive Program and Services .....	37
Program Management .....	37
Facilities and Equipment .....	38
Instructional Programs .....	38

VII. ADDITIONAL RESOURCES .....	39
Directories .....	40
Professional Organizations .....	40
State and Community Resources .....	41
Colleges and Universities .....	42
Psychoeducational Centers .....	44
Georgia Learning Resources Centers .....	44
VIII. STATE SCHOOLS .....	45
Summary Sheet .....	46
Introduction .....	47
APPENDIX A — Glossary of Terms .....	53
APPENDIX B — Assessment of Instruments for Hearing Impaired .....	57
APPENDIX C — Selected Assessment Instruments for Reading .....	67
APPENDIX D — Hearing Aid Check Forms .....	73
APPENDIX E — Instructional Materials for The Hearing Impaired and Bibliography .....	77

# Chapter I

## Definitions

**Hearing Impaired** is a broad term which includes deaf and hard of hearing. Hearing problems which interfere with learning in any way are classified as hearing impairments. A hearing impaired child is one who has a hearing loss which interferes with his or her acquisition or maintenance of auditory skills necessary to develop speech and language. This includes children who are hearing impaired at birth and those who develop hearing problems later.

**Deaf** means the absence of enough measurable hearing without amplification in both ears to significantly exclude one's awareness of sound and to greatly impair the normal development of language, speech and auditory skills.

**Hard of Hearing** means the absence of enough measurable hearing without amplification to limit the normal development of speech, language and auditory skills.

For the purpose of this resource guide and the Georgia Department of Education's Special Education Monthly Reporting Form, the terms hearing impaired and hard of hearing are synonymous. A hearing impaired child is one that exhibits a pure tone average range of 30-60dB (American National Standards Institute). A deaf child is one that exhibits a pure tone average of 65dB-90+dB ANSI.

### Types of Hearing Loss

**Conductive hearing loss** is the result of reduced conduction of sound through the outer and/or middle ear to the inner ear. Function of the neural system is not involved. This type of hearing loss is primarily a medical problem which, in the majority of cases, can be cleared by treatment.

**Sensory-neural hearing loss** refers to hearing problems which involve the inner ear or the central nervous system. This type of hearing loss is often referred to as nerve deafness. These hearing impairments cannot be cleared by medical treatment but may be partially compensated for through special education and use of amplification.

**Mixed hearing loss** is combined of conductive and sensory neural components and can be partially compensated for through special education and use of a hearing aid.

# Chapter II

## Eligibility Criteria

Entrance criteria provides the basis for placing students in a program for the hearing impaired and is the foundation for program evaluation. The criteria serve three purposes--they assure continuity in the assessment and placement of hearing impaired students, allow for the design of in service for special education specialists, regular classroom teachers and administrators, and ensure adequate programming for each hearing impaired student.

Georgia's *Program for Exceptional Children Regulations and Procedures* define entrance criteria for the hearing impaired as follows.

*Otological and audiological evaluations shall be provided with initial referral. In addition to the information required in the general provisions (page 15), hearing impaired students shall have audiometric evaluations under the supervision of a certified, licensed audiologist and medical evaluations by licensed medical doctors. These evaluations should be updated every two years or as otherwise indicated.*

In compliance with the *Program for Exceptional Children Regulations and Procedures* for the identification of the hearing impaired, an audiological evaluation must be obtained. It is necessary to assess the overall capabilities of the hearing impaired through a wide range of test instruments. Major areas of importance include intelligence, general development, language (receptive and expressive), academic, cognitive achievement, visual function, auditory function, communication, psychomotor and social, emotional development.

The following sections contain descriptive lists of instruments which can be used in evaluating students' skills in specific areas. Most of these measures do not contain normative data specific to hearing impaired populations. However, they can be adapted to provide a degree of meaningful information as related to student performance when combined with teacher observation, criterion testing and basic background information. These materials were adapted from the *Report on the Task Force on Hearing Impaired*, Pennsylvania State Department of Education, 1977.

These assessment techniques are not intended to be viewed as being exhaustive but may serve as a basic resource list.

### **Audiological and Otological Assessment**

Information required for identification of the hearing impaired is based upon an evaluation by an audiologist and otolaryngologist and other pertinent information

The audiological assessment should provide hearing threshold information, measures of speech audiometry and acoustic impedance. A battery of special audiological tests and the binaural summation test, when possible to obtain, are helpful measures in identifying hearing impairments.

Tests of central auditory impairment are in a developmental stage and no key test instrument has been developed and standardized for the hearing impaired population

**Instrument - Behavioral Observation Audiometry (BOA)** - soundfield testing using warble tones or narrow band noise and speech

**Description** - Pure tone audiometry to determine threshold sensitivity. Audiometer must meet ANSI standards.

**Reliability and validity** - Sound field test results are considered reliable if +5dB upon retest. Reliability and validity are dependent upon the observer's judgement of a behavioral response

**Strengths** - Can be used with very young children and difficult to test individuals

**Other Assessment Techniques Necessary** - Acoustic impedance, otological examination, continued follow-up to determine thresholds.

**Instrument - Audiometry** - puretone air, bone conduction with masking as required.

**Description** - Tests are used to determine threshold sensitivity of the ear and to identify thresholds for air and bone conduction. The audiometer must meet ANSI specification.

**Reliability and Validity** - Puretone results are considered reliable if +5dB upon retest. Reliability and validity depend upon responses of subject

**Instrument — Tympanometry** — static compliance, tympanogram, middle ear pressure, acoustic reflexes, reflex decay, binaural summation.

**Description** — an objective measure of middle ear function and acoustic reflex levels. Changes in compliance of middle ear system are monitored as air pressure on the tympanic membrane is varied.

**Reliability and Validity** — Tympanometry is an objective test requiring only the passive participation of the subject.

**Strengths** — An objective test.

**Instrument — Speech Reception Threshold (SRT)**

**Description** — SRT is the loudness level at which 50 percent of speech presented is intelligible to the listener. Stimuli that can be used, digits (0-10) or spondees, (familiar two syllable words)

**Reliability and Validity** — SRT for each ear should be +6dB from the pure tone average of .5K, 1K and 2K, HZ.

**Strengths** — SRT helps corroborate pure tone findings.

**Instrument — Speech Discrimination** — W22, NU-6, PB-K, WIPI and other appropriate materials.

**Description** — A measure of a person's ability to discriminate speech.

**Reliability and Validity** — Reliable if +8 percent upon retest.

**Instrument — Tangible Reinforcement Operant Conditioning Audiometry (TROCA)**

**Description** — A technique of systematic reinforcement audiometry for use with the mentally impaired and difficult to test. Child receives positive reinforcement after he or she pushes a response button on a feeder box whenever he or she perceives a sound.

**Reliability and Validity** — Results are considered reliable if are +5dB upon retest.

**Publisher's Comments** — Hearing test for mentally impaired and difficult to test.

**Strengths** — Very valuable with mentally impaired.

**Instrument** — Audiometry using special tests, i.e., Bekesy, SISI, Tone Decay, ABLB, Stenger.

**Description** — Tests are used to differentiate cochlear from retrocochlear pathology and other diagnostic information. Audiometer used must meet ANSI specifications.

**Instrument** — Otologist, otolaryngologist, oto-rhinolaryngologist

**Description** — Otological evaluation for the diagnosis of hearing impairment.

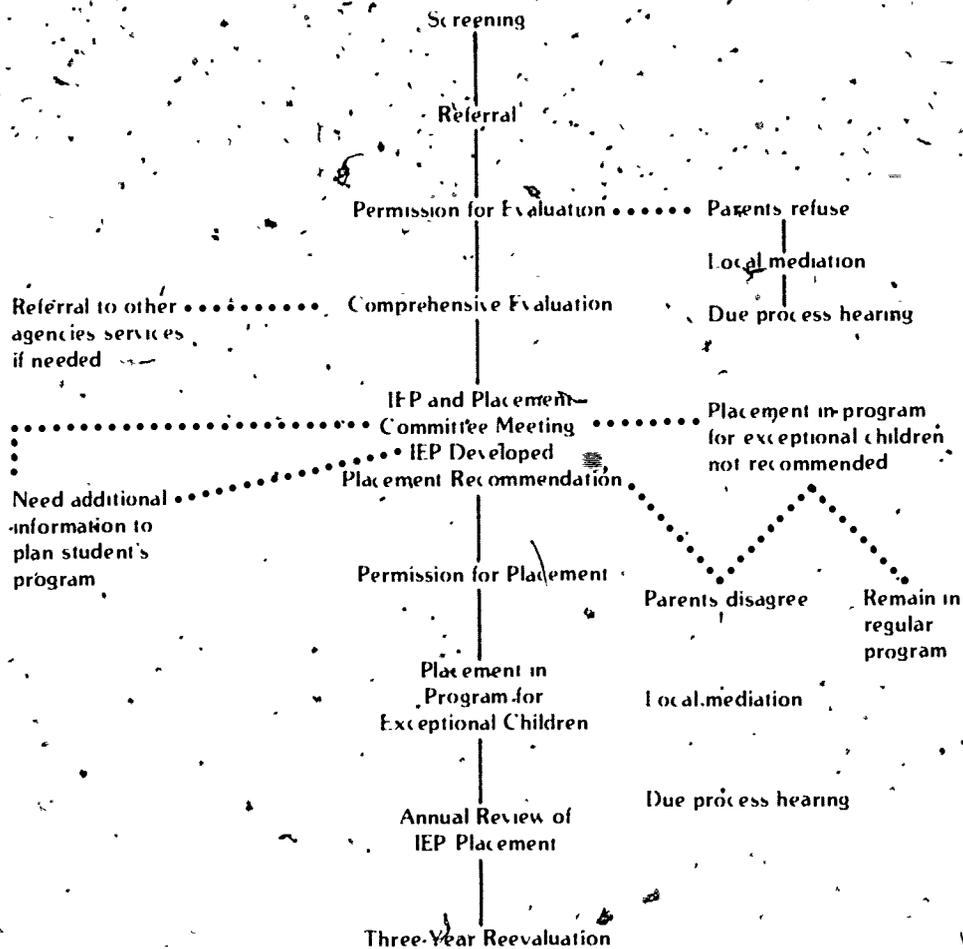
# Chapter III

## Due Process

**Introduction**

Parents' and children's rights under P.L. 94 142 are protected through a procedural due process structure. The child, the parents and the schools are involved in the specifics of due process.

The following is a chart of due process procedures



## Screening

Screening identifies, as early as possible, the child who needs to be placed in a program for the hearing impaired. Screening is the first step in the placement process and is used only to identify those children who need further evaluation. No student should be placed based exclusively on screening data alone. Some considerations for hearing screening follows.

- An audiologist should be responsible for designing hearing screening programs, and the screening should be conducted or supervised by a qualified audiologist or speech pathologist with appropriate training. Support personnel (after receiving appropriate training) may administer screening tests under supervision of a qualified professional.
- Screening of all students at regular intervals should be provided using at least limited frequency audiometric testing with individuals or groups. Individual tests are recommended for use with prekindergarten through third grade students unless reliable group procedures are available. Individual or group tests may be used with students above the third grade level.
- Screening audiometers should be calibrated to American National Standards Institute (ANSI) specifications initially and recalibrated at least annually. Daily listening checks should be performed to determine that audiometers are grossly in calibration and that no defects exist in major components.
- The ambient noise level in any space used for audiometric screening should not exceed 51 dB.
- Screening procedures should be administered uniformly by all testers, with specified test frequencies, screening level and criterion for failure. Minimal procedures include screening at 25dB HTL at 500 Hz, 1000 Hz and 4000 Hz. If this limited procedure is used, failure to hear at the screening level for any one frequency is criterion for failure.
- Rescreening of failures may be provided immediately or within one or two weeks of the initial testing. Rescreening should be done under the direct supervision of a qualified professional.
- The above procedures represent a minimally acceptable hearing screening program. An excellent screening program includes impedance audiometry. The inclusion of impedance audiometry increases the likelihood that students with otitis media will be identified.
- Comprehensive audiological and otologic examinations should be arranged for those students who exhibit potential hearing loss.

## Referral

Referral is the process whereby parents or guardians, students themselves, school personnel, appropriate public agencies or other professionals may request assessment of a student's abilities.

## Comprehensive Evaluation

### Initial Evaluation

All children who are considered for special education services must be screened for possible hearing and vision difficulties prior to educational or psychological evaluations.

Before any action is taken with respect to the initial placement of a hearing impaired child in a special education program a full and individual evaluation must be conducted in accordance with the following. The local education agency (LEA) must use appropriate evaluation procedures including trained evaluation personnel, multidisciplinary teams, validated and nondiscriminatory assessment of language or other mode of communication commonly used or understood by the child and more than one procedure or instrument, as mandated in the eligibility criteria located in Chapter II.

### Signed Parental Consent

The local school system must have signed, informed parental consent on file before any child is singled out for any evaluation other than routine screenings happening to all children at some point in their school year (e.g., mass vision, dental, hearing and speech screening unless parent has previously filed a form of protest).

- Reevaluation

All hearing impaired children enrolled in special education programs must be comprehensively reevaluated educationally or psychologically no later than three years after the last previous evaluation. The reevaluation may take place within the three years upon the request of any person having the original authority to make an initial referral, with the approval of the placement committee.

### Individualized Education Program (IEP)

An IEP is developed for each handicapped child who is receiving or will receive special education. This requirement applies to all public agencies. The total IEP, including long and short term objectives, is developed prior to a placement in a special education program.

The IEP must be developed in an individualized planning conference initiated and conducted by the responsible agency.

A student should have one IEP, even if enrolled in two or more special education programs.

The IEP is an educational and related services plan and not a binding contract for which the agency is responsible if the child does not achieve the growth projected in the goals and objectives. However, the local education agency must provide those services that are listed in a child's IEP.

- Participants in Individualized Planning Conferences

The meeting participants will include the following.

A representative of the agency, other than the child's teacher who is qualified to provide or supervise the provision of special education. This does not exclude other qualified special education instructors.

The child's teacher or teachers, special or regular or both, who have a direct responsibility for implementing the IEP.

The responsible agency must make every effort to insure that each individualized planning conference includes one or both of the parents, the child, when appropriate, and other individuals at the discretion of the parent or agency.

For a handicapped child who has been evaluated for the first time, the responsible agency must insure that a member of the evaluation team or someone who is knowledgeable about the evaluation procedure and familiar with the evaluation results participates in the meeting.

- Parent Participation

Each responsible agency must make every effort to insure that the parents of the handicapped child are present at the individualized planning conference or are given the opportunity to participate, including scheduling the meeting at a mutually agreed upon time and place and notifying the parents of the meeting early enough to insure that they will have an opportunity to attend. Notification to parents must indicate the purpose, time and location of the meeting and who will be in attendance. All communications to parents must be in both English and the primary language of the home if the primary language is other than English.

A meeting may be conducted without a parent in attendance if the responsible agency is unable to convince the parents that they should attend. In this case, the responsible agency must record its attempts to involve the parent(s). The attempts may include a written waiver of his or her rights to participate, **in accordance with due process procedures**, telephone calls, correspondence and home visits. Upon request, parents must be given a copy of the IEP. Upon request of the parents, a formal due process hearing must occur in conformance with procedures outlined in Georgia's State Program Plan for P. L. 94-142.

- Content of IEP

A statement of the child's present levels of educational performance.

A statement of annual goals including short-term instructional objectives.

A statement of the specific special education and related services to be provided to the child and the extent to which the child will be able to participate in regular educational programs.

The projected dates for initiation of services and the anticipated duration of the services.

Appropriate objective criteria, evaluation procedures and schedules for determining on at least an annual basis, whether the short-term instructional objectives are being achieved.

## Placement

### • Initial Placement

No student shall be placed in a special education program until that student is the subject of a meeting of the Special Education Placement Committee which must review all pertinent information and determine the appropriate program for that child.

The decision to place any child into a special education program must not be made exclusively or principally upon results of tests administered during evaluation. All pertinent data on each child should be reviewed by the entire committee.

Placement committee meeting minutes must be kept.

### • Signed Parental Consent

All children who are evaluated for possible special education services will be subject to review by the placement committee. All children who are recommended by the placement committee to be placed in a special education program must have signed, informed parental consent on file within the school system before placement can occur.

### • Special Education Placement Committee — Reevaluation

Upon the request of any person having the original authority to make an initial referral, but no later than three years after the last placement decision, all children who are enrolled in special education programs will be re-evaluated by the Special Education Placement Committee.

Any time a change in educational placement is contemplated, the pertinent information must be reviewed and change approved by the placement committee and the child's parents.

## Confidentiality

LEAs maintain records and reports on handicapped children. These records and reports contain confidential data. Each LEA must provide instructions to persons collecting or using personally identifiable data. This instruction informs LEA personnel of policies and procedures for the use of confidential data.

## Exit Criteria

Students to be dismissed from a program for hearing impaired students must be assured that dismissal is done according to due process. Dismissal from a program for the hearing impaired is a change in placement. Whenever a change in placement is proposed, all pertinent information must be reviewed and the change approved by the Special Education Placement Committee.

For further information on due process or other procedural safeguards in effect in Georgia, refer to the Georgia Department of Education Program for Exceptional Children Regulations and Procedures and Georgia's State Program Plan for P. L. 94-142. Copies of these documents are available in the office of your local school superintendent, director of special education or your local Georgia Learning Resource System.

Additionally, information on local system procedures is contained in the local system's Special Education Comprehensive Plan which is also available from your local school superintendent or special education director.

# Chapter IV

## Program Organization

17

13

## Philosophy, Goals and Objectives

Though most hearing persons take their sense of hearing for granted, the effects of the inability to hear are profound. It is through this primary avenue for learning that people acquire listening and speaking skills upon which they build their subsequent reading, writing and communication skills.

A child with a hearing impairment has severe problems in language acquisition, comprehension and usage. If undetected, hearing impairment may be the cause of a child's learning problems and could result in mislabeling and inappropriate placement. The earlier a child's hearing loss is detected, the earlier an effective educational program can begin.

The cost of educating hearing impaired children in a special education program far surpasses the cost of a regular school program. In addition to the basic tools used in a regular classroom (software and hardware), various kinds of auditory equipment and audiovisual aids must be used. These are an integral part of this special education program. Amplification systems, though expensive, are basic educational equipment essential to the education of the hearing impaired.

The responsibility of providing hearing aids, proper diagnosis and treatment remains a constant factor in the lives of families of hearing impaired children. Ear molds are outgrown, batteries and cords need to be replaced, and aids need periodic evaluation of their compatibility to the wearer as well as the evaluation of the hearing aid's most efficient usage.

Other consequences of hearing impairment are the adjustment problems related to the hearing loss and resultant communication problems for the parents, the other family members and the hearing impaired child. The family needs professional help and guidance from the time the hearing loss is suspected to understand its effects upon the family member. The family also needs community resources to identify the hearing loss. Family members need to be able to use special techniques and skills to communicate with the hearing impaired child. The hearing impaired child may be left out of family interaction if he or she cannot effectively communicate. This deprives the child of an important aspect of social-emotional growth and development.

A hearing impairment affects and limits the choice of vocations available to the student. Vocational rehabilitation counselors must work together with the student, the family and educators to help the student prepare for meaningful employment in a rapidly changing, technological environment. \*(See Related Services, Chapter V)

The effects of a hearing loss are complex and pervasive and will affect the hearing impaired person's home, educational, social, psychological and vocational endeavors throughout life.

To mitigate the effect of hearing loss on the life process of a child, a comprehensive delivery system must serve that child. It must identify early the hearing impairment, provide for properly prescribed amplification and effective early infant intervention to stimulate language and speech development. There must be a complete continuum of educational services from preschool through secondary education. The educational program must include the essential components of a comprehensive program — skilled, trained teachers of the hearing impaired, sufficient allocation of special materials and equipment and complete support services.

Although the strategies for developing educational programs for the hearing impaired will differ from system to system, the mandated procedural safeguards remain the same. Appropriate screening and referral procedures must be followed. Nondiscriminatory psychological and educational evaluations must be made prior to placement. The placement process must be structured to include the discussion of all evaluation instruments that aid appropriate placement and the development of a complete individualized educational program (IEP). A process for the annual review of the IEP must be provided as well as adequate input and deliberation when a change in placement is recommended. Above all, the procedures must incorporate involvement and input from parents at each step of the due process procedures.

## Delivery Models

- *Self-contained class*

Students are enrolled full time in a class taught by a certified teacher of the hearing impaired. The chronological age range of these students must not exceed five years and the range of instruction levels must not exceed four years.

The purpose of the **preschool** program is to lay the foundation for language and communication skills. A child must be enrolled at three years of age.

The purpose of the **primary** program is to provide instruction using a quality hearing impaired curriculum or the LEA's curriculum modified and adapted for hearing impaired students.

The purpose of the **intermediate** program is to provide instruction using a quality hearing impaired curriculum or the LEA's curriculum modified and adapted for hearing impaired students. The degree of integration will depend on the needs of the individual.

The **secondary** program should be geared to providing the students with the competencies necessary for self-sufficiency in the community. Communication skills and appropriate academic training should be continued with added opportunities for vocational education and training.

#### Case Load Limits

- Parent-infant — ages zero to three, maximum eight students
- Preschool — ages three to five, maximum six students. Instructional level range not to exceed three years
- Primary/elementary — age range varies according to difference in instructional programs or levels, maximum eight students. Instructional level range not to exceed three years
- Middle — maximum eight students
- Secondary/senior high — maximum eight students

#### • Resource Room

Students are enrolled in a regular classroom and also receive instruction from a certified instructor of the hearing impaired located in the school building. The amount of time of instruction will depend on the needs of the individual students.

A maximum of eight to 12 students, depending on the severity of the students' impairments, levels of instruction and any multihandicapping conditions, will be allowed in a resource room.

#### • Itinerant Services

Students are enrolled in a regular class at the school in their own attendance area and receive instruction and support services from a teacher of the hearing impaired. The teacher moves from school to school, the time spent with students will depend on the individual needs of each student. (The teacher works directly with the student and the classroom teacher in offering necessary adaptations and support services to allow the student to achieve successfully to the extent of his or her abilities. Services on all levels — kindergarten, elementary, middle and secondary — will follow the same delivery pattern with adaptations particular to the student's grade level.)

Five to 12 students, depending on the severity of the students' impairments, any multihandicapping conditions, levels of instruction, traveling distance and number of schools served.

A student who usually receives no regular academic support from a teacher of the hearing impaired but whose hearing loss makes him or her eligible for service is termed a check student. According to the individual needs of the student, the hearing impaired teacher checks on the student's academic functioning and progress by visits to the school and parent contacts on a scheduled basis (once a week, month or quarter). If these scheduled checks show that the student is experiencing difficulty, due process procedures are implemented to allow for alternative placement or service.

#### Personnel

##### Local education agencies (LEAs) must

employ certified teachers of the hearing impaired who meet standards in compliance with approved state department documents;

provide adequate and appropriate housing in regular school buildings where hearing impaired students may be with their hearing peers;

supply adequate and appropriate equipment and materials;

reimburse itinerant teachers for transportation expenses;

provide regular school day for hearing impaired children unless a shortened day is deemed necessary for certain students;

supply adequate transportation services for hearing impaired students who must attend a school out of their home district to receive an appropriate education;

provide permanent central location in a regular public school for those students who must attend a school outside of their home districts in order to receive an appropriate education.

**Supervisor/director of special education must**

establish and coordinate the program for the hearing impaired within approved regulations and procedures of the Georgia Department of Education, Program for Exceptional Children;

help obtain evaluative services (audiological, psychological, medical and academic) for hearing impaired children upon referral;

recruit qualified professional personnel for the hearing impaired program;

help coordinate provisions for special transportation for the hearing impaired;

help provide instructional materials and equipment;

coordinate services with community agencies;

be knowledgeable of all funding sources and help provide appropriate budget requests;

act as an agent of the local board of education in carrying out the mandates of the board and act in an advisory capacity to the board when necessary;

work as a public relations consultant in the community to maintain a high interest in programs for the hearing impaired;

serve as a liaison with colleges and universities for teacher education;

take an active part in supervision to maintain rapport with the staff, even though classroom supervision and instructional leadership may be responsibilities which can be delegated to consultants or lead teachers;

coordinate in-service and workshop activities for teachers of the hearing impaired and others serving hearing impaired students.

**Lead teacher of the hearing impaired program must**

serve as a professional resource person to the entire school system in the area of the hearing impaired;

serve as a professional resource person to individual classroom teachers;

coordinate the acceptance of referrals - staffing arrangements for hearing impaired students;

help coordinate in-service and workshop activities for teachers of the hearing impaired;

evaluate teacher performance through observations and classroom visits;

attend professional meetings and workshops relating to the education of the hearing impaired;

coordinate the educational program in terms of curriculum, instruction, staffing and placement of students;

serve as a channel of communication between teachers and administrators;

act as a supportive person for teachers of the hearing impaired by way of classroom supervision and instructional leadership;

observe in the classroom to

keep abreast of class and individual progress, curriculum areas covered and instructional techniques used

evaluate the quality and appropriateness of instructional procedures and provide feed back to teachers

offer ideas for improving the quality of instruction

help teachers function successfully in areas such as home school contact, classroom administration and professional matters

make certain students are helped to realize their full potential;

carry on a continuous evaluation of the hearing impaired program. (If it is necessary for the LEA to designate a lead teacher, he or she must be released of full-time teaching responsibilities.)

The **teacher of hearing impaired** students must be certified by the State of Georgia Teacher Certification Department in the area of hearing impaired. He or she also must

plan for parent observations and conduct parent teacher conferences pertaining to teacher-student relationships, parent-child relationships and the academic progress of the student involved;

participate in formulating and implementing the IEP;

complete appropriate reports and records as required by supervisor, lead teacher or principal,

evaluate teaching techniques and plan teaching strategies;

attend staff meetings, parent meetings, in-service meetings and professional enrichment meetings,

provide instruction using an appropriate curriculum. This instruction should be accompanied by continuous attention to improving communication and language skills. These students must be given every opportunity to integrate with their hearing peers during academic and nonacademic periods of the school day. The degree of integration will depend on the individual student. Specific instructional responsibilities include the teaching of academic subjects in conjunction with language, speech, reading, math, social studies, science, enrichment activities such as art, music, physical education, practical experiences, field trips.

work closely with other teachers in the school to give adequate information about the hearing impaired class and its function;

schedule and arrange field trips;

keep abreast of activities in the regular hearing classroom;

be responsible for the educational development of the students assigned to him or her, their social as well as physical welfare within the school's environment.

The **resource/itinerant teacher** of the hearing impaired must perform the following duties.

Test, evaluate, support and coordinate a total educational program for each hearing impaired child on his or her case load.

Meet the needs of each student on a daily basis, find solutions to any academic and nonacademic problems that may arise.

Communicate effectively with parents, students and educators regularly.

Be knowledgeable in all areas of academics. He or she must provide instruction using the curriculum provided by the hearing impaired program and the LEA curriculum guide. He or she must support the student in math, English, social studies and science, continue to build skills of audition, speech reading, speech improvement and language proficiency, develop study habits, increase learning skills and promote interaction of hearing and deaf students.

Work closely with the classroom teacher of each student to schedule the student at the most appropriate time of the day. The progress and needs of the student must be communicated to the classroom teacher so that good practices may be incorporated in the child's daily program.

Provide a schedule for the lead teacher of the hearing impaired program and the principal and classroom teachers involved. Notify the lead teacher and the principal and classroom teachers involved of any deviation in schedule.

Provide information to regular classroom teachers concerning what to expect from hearing impaired students in general and as individuals in their classes.

Maintain a case load of students to be seen. The frequency of visits and degree of support will be determined by the need of the individual student.

Observe the students in the regular classroom to better coordinate work with that of the regular classroom teacher.

Assist the classroom teacher in achieving a balanced educational program for the hearing impaired child.

Help the hearing impaired student grow towards greater independence while providing the assistance he or she requires to help him or her achieve in an integrated setting.

### **In-service**

#### **Goals**

To provide relevant information, training, experience and resources necessary for compliance with and understanding of P. L. 94-142.

To provide opportunities for experiences which promote personal-professional growth.

To meet the needs of teachers of the hearing impaired, the instructional program, the students and the parents as they relate to individualized instruction.

To offer training in the various components of the development of an IEP.

To offer training and resource support in the implementation of IEPs.

To develop strategies and techniques for evaluating and monitoring IEPs.

#### **Objectives**

The hearing impaired teacher will demonstrate an understanding of, and be proficient in, the various aspects of developing, implementing and evaluating the IEP process to include the following.

- selecting appropriate assessment procedures

- collecting and recording educationally-relevant data

- knowledge of the importance of group dynamics and interpersonal skills

- understanding of the various role responsibilities

- knowledge of due process procedural safeguards

- ability to establish appropriate individual goals and objectives

- knowledge of available resources and related services

- ability to translate goals and objectives into an appropriate instructional program using effective methods and materials

- knowledge of techniques and strategies for evaluating and maintaining student progress

#### **Training**

Targeted areas for training and workshop presentations may include the following.

Legal parameters of P. L. 94-142

#### **IEP**

#### **Assessment**

Translating assessment/observation data into current levels of functioning

Establishing appropriate annual goals

Writing short term instructional objectives

Curriculum elements, methods and materials relevant to individualized planning

Strategies for monitoring student progress

Parent role in planning meetings, conferences and consultation

Due Process Procedural Safeguards and process implementation

Strategies for program evaluation

State monitoring process

Referring to and working with vocational rehabilitation

New and different materials

In-services are effective ways of disseminating information to appropriate groups. Teachers in all areas (special education and regular classroom teachers), administrators, aides, bus drivers can benefit from effective in-service programs. The following outline is suggested as a guide in implementing an effective in-service.

- |                     |               |
|---------------------|---------------|
| A. Needs assessment | D. Summary    |
| B. Preparation      | E. Evaluation |
| C. Activities       |               |

Suggestions for effective in-service.

Get to the point. Don't bore the group with unnecessary information.

Select interesting activities

Small groups may prove best.

Technical information should vary according to target group.

Evaluation should be oral or written.

Allow time for questions.

Involve group in preparation of activities to be presented to the in-service.

### Facilities

#### General

The school system shall provide a room in a regular school building, with suitable and appropriate furniture, materials and equipment for all rooms where hearing impaired students are housed. Carpet and air conditioning are highly recommended because they serve as sound absorbers for interfering noises both inside and outside the room. Amplification equipment shall be provided as necessary. The location of the room should be away from any undue noise and interruptions.

#### Self-contained

The room shall be standard classroom size which is 750 square feet. Furniture, suitable to the needs of the students enrolled, shall be provided.

#### Resource Room

The room need not be as large as a standard classroom. It shall be furnished with appropriate furniture to meet the needs of the students served. It shall have electrical outlets, be well lighted and ventilated and contain adequate shelving and storage space. The room should be at least 350 feet or larger.

#### Itinerant

A quiet room free from interruptions, with electrical outlets and adequate heat, lighting and ventilation should be provided in each school served. The room shall be large enough to house furniture and equipment for at least five students and one teacher without creating crowded conditions that may constitute a safety or fire hazard.

\*Note: See Impaired Hearing Facilities Checklist, page 20.



# Chapter V

## Instructional Programs

## Direct Service Objectives

Direct services are those total educational services that are provided by the teacher of the hearing impaired as opposed to related services provided by any other professional or agency. To provide for the educational services of a hearing impaired student, there are certain standards in facilities and administration that infringe upon direct services. This section takes into account those areas that make possible the proper implementation of this educational service. Although direct services can be seen in the development of the individualized education program, the success of these services is directly proportionate to the implementation of the standards that follow.

## Suggested Curriculum Guides

Within the population designated hearing impaired, the personality, intellectual and auditory abilities of each student is so unique making it impossible to form a single, static guide for curriculum. The educational program for a particular student should be adopted from the regular or specialized curriculum appropriate for the diagnostic profile obtained. The curriculum should be expanded according to the needs of the student to incorporate functional skills which increase physical, social and vocational independence.

A curriculum consists of the plans, activities and experiences by which a student will learn. The professional staff of a school sets forth the needs of the students based on certain assumptions about learning and educational goals for the students. They then identify the scope and sequence of instructional activities by means of which they hope students will successfully achieve these goals. A good curriculum does not stop here but also identifies methods, procedures, materials and references which will be used.

Although a curriculum for a hearing impaired or deaf child cannot be described within this limited space, a good curriculum should provide for auditory training, speech and lipreading and should offer learning experiences in a wide variety of contexts. The following pages will offer suggested curriculum guides for the appropriate age-levels.

## List of Guides to be Used with the Hearing Impaired

### Model

Parent-infant  
(Zero through three years)

### Guide

Winifred Northcott's, *Curriculum Guide for Zero Through Three*  
Compiled by: Leah Tolzin, M.A., *Methods and Materials in Education of Hearing Impaired*

*Curriculum Guide for Hearing Impaired Students*, Metropolitan Atlanta, Georgia. Pages 1-95.

*Speech*, The Clarke School for the Deaf.

*Art*, Bibb County Guide for Hearing Impaired Students.

*Music*, Bibb County Guide for Hearing Impaired Students.

*Speech and The Hearing Impaired Child: Theory and Practice*, Daniel Ling.

*Teaching Arithmetic to Deaf Children*, Beatrice Ostern Hart, Lexington School for Deaf.

*Signing-Exact English*, Gustason, Pftzing and Zawolkow.

*Auditory Training*, The Clarks School for the Deaf.

*Curriculum Guide for Hearing Impaired Students*, Metropolitan Atlanta, Georgia. Pages 97-303.

*Speech*, The Clarke School for the Deaf.

*Art*, Bibb County Guide for Hearing Impaired Students.

*Music*, Bibb County Guide for Hearing Impaired Students.

*Speech and The Hearing Impaired Child: Theory and Practice*, Daniel Ling.

Preschool  
(Three through six years)

*Teaching Arithmetic to Deaf Children*, Veronica O'Neill, Lexington School for Deaf.

*Teaching Reading to Deaf Children*, Beatrice Ostern Hart, Lexington School for Deaf.

*Auditory Training*, The Clarke School for the Deaf.

Science, "Learning Center for Preschool", *Bibb County Guide for Hearing Impaired Students*.

Reading, *Project Life*. Perceptual Thinking Series and Perceptual/Thinking Series (Prereading), Storyland Series.

Language, *Apple Tree Language*.

Language, *Peabody Language*.

Language, *Bowman Manipulative Series*.

Writing, *Palmer Method*. "We Learn and Write Series", K or 1 *Writing Readiness*.

Social Studies, *Curriculum for Hearing Impaired Students*, Metropolitan, Atlanta. Pages 207-218.

*Signing Exact English*, Gustason, Pftzing and Zawolkow.

Supplementary guide: *Methods and Materials in Education of Hearing Impaired*. Correspondence Course. Instructor: Jean Burglund, M.A. University of Alaska, Anchorage.

*Science for Deaf Children*, Alan Leitman, Pages 21 through 37.

*Auditory Training*; Supplement - *What's Its Name?* Jean Utley

*Auditory Training*; Supplement - *Auditory Training for Children*, Mary Wood Whitehurst.

Health. *Curriculum Guide for Hearing Impaired Students*, Metropolitan, Atlanta,

Health: Supplement - "Little Ideas", Dairy Council of Georgia, Macon, Georgia.

Health: Supplement - copied from *Curriculum, Cognition and Content*, Harriet G. Kopp, pp. 139-146. *Bibb County Guide for Hearing Impaired Students*, Metropolitan, Atlanta. p. 267.

Math, *Project Life* - Grades one through three.

*Curriculum Guide for Hearing Impaired Students*, Metropolitan, Atlanta, Georgia. Pages 97-303.

*Speech*, The Clarke School for the Deaf.

*Speech and the Hearing Impaired Child. Theory and Practice*, Daniel Ling.

*Signing Exact English*, Gustason, Pftzing and Zawolkow.

Art, *Bibb County Guide for Hearing Impaired Students*.

Music, *Bibb County Guide for Hearing Impaired Students*.

(Preschool program will adopt and adapt curriculum used in local county public school in area or areas where Hearing Impaired student is integrated. The teacher should also use materials from this curriculum which specifically meet the needs of each individual student on his or her level in subject matter where student is not integrated in a regular kindergarten program.)

Primary  
(six through 10 years)

(Primary resource program will adopt and adapt curriculum used in local county public school system in areas where hearing impaired student is integrated. The teacher should also use materials from this curriculum which specifically meet the needs of each individual student on his or her level in subject matter where student is not integrated in a regular classroom.)

*Teaching Arithmetic to Deaf Children*, Veronica O'Neill, Lexington School for Deaf.

Math, *Bibb County Guide for Hearing Impaired Students*. Understandings to be developed are listed according to model copied from *Mathematic for Georgia Schools*, Volume 1.

*Teaching Reading to Deaf Children*, Beatrice Osterm Hart, Lexington School for Deaf.

Reading, Scott's Foresman Program.

Open Highway Series - Reading.

Project Life - Reading. Perceptual - Thinking Series (Primary)  
Reading: Supplement - *Dictionary of Idioms for the Deaf*, Boatner and Gates.

Reading: Project Life-Language/Reading Level I, II, III.

*Apple Tree Language*

*Visual Language Series*, Pennsylvania School for Deaf.

Language, *Bowmar Manipulative Series*.

*Language of Directions*, Mary Lou Rush.

Writing, *Palmer Method*. Books 1, 2 and 3.

Spelling, Silver Burdett, Level 1, 2 and 3.

Science, *Science for Deaf Children*, Allan Leitman, The Lexington School for Deaf. Pages 39-51.

SCIS Science Program

Science, *Bibb County Guide for Hearing Impaired Students*. "The Primary Program" copied from *Curriculum: Cognition and Content*, Harriet Green Kopp.

Social Studies, *Curriculum Guide for Hearing Impaired Students*, Metropolitan, Atlanta, Georgia. Pages 219-225.

Science and Social Studies: Supplement - *World Traveler*.

*Auditory Training*, The Clarke School for the Deaf.

Holt, Rinehart and Winston, Math Books Readiness through book 3.

Individualized Mathematics System (IMS)

Health: *Curriculum Guide for Hearing Impaired Students*, Metropolitan, Atlanta. Page 273.

Physical Education: *Curriculum Guide for Hearing Impaired Students*, Metropolitan, Atlanta. Page 273.

Math: *Project Life* - Grades 1-3.

Social Studies: *Bibb County Guide for Hearing Impaired Students* - Primary Level.

*Curriculum Guide for Hearing Impaired Students*, Metropolitan, Atlanta, Georgia.

Elementary  
(11 through 13 years)

(Elementary resource program will adopt and adapt curriculum used in local county public school system in areas where hearing impaired student is integrated. The teacher should also use materials from this curriculum which specifically meet the needs of each individual student on his or her level in subject matter where student is not integrated in a regular classroom.)

(Elementary itinerant program will adopt and adapt curriculum used by the local county public school system where applicable. The teacher shall also

Speech, The Clarke School for the Deaf.

*Speech and the Hearing Impaired Child: Theory and Practice*, Daniel Ling.

*Signing Exact English*, Gustason, Pftzing and Zawolkow.

Music, *Bibb County Guide for Hearing Impaired Students*.

Art, *Bibb County Guide for Hearing Impaired Students*.

*Teaching Arithmetic to Deaf Children*, Veronica O'Neill, Lexington School for Deaf.

Math, *Bibb County Guide for Hearing Impaired Students*. Understandings to be developed are listed according to model . . . copied from *Mathematics for Georgia Schools*, Volume I.

*Teaching Reading to Deaf Children*. Beatrice Ostern Hart, Lexington School for Deaf.

Scott's Foresman Program.

Open Highway Series - Reading.

Project Life - Reading. Great People Series. Houghton Mufflin Series.

Reading Supplement: *Dictionary of Idioms for the Deaf*, Boatner and Gates.

Project Life - Language/Reading Level IV - V.

Language, *Apple Tree Language*.

*Visual Language Series*, Pennsylvania School for Deaf.

*Language of Classifications: Animals*, Mary Lou Rush.

Writing, *Palmer Method*. Books 4, 5 and 6.

*Science Curriculum Series*, 1975. Levels 2, 3, 4 and 5.

*Spelling*, Silver Burdett, Levels 4, 5, 6 and 7.

SCIS Science Program.

Science, *Bibb County Guide for Hearing Impaired Students*. Reprinted from *Curriculum: Cognition and Content*, Harriet Green Kopp.

Social Studies, *Social Studies, Government History*, Curriculum Series, 1975, Clarke School for the Deaf.

Science and Social Studies: Supplement - *World Traveler*.

*Auditory Training*, The Clarke School for the Deaf.

Holt, Rinehart and Winston, Math books, book 4-7.

Individualized Mathematics System (IMS)

Health, *Bibb County Guide for Hearing Impaired Students*. Reprinted from *Curriculum: Cognition and Content*, Harriet Green Kopp.

Physical Education - Integrate with hearing peers

*Clinician's Handbook for Auditory Training*, J. C. Kelly, Second edition, 1973, The Alexander Graham Bell Association for the Deaf, Washington, D.C. 20007.

*Bibb County Guide for Hearing Impaired Students, Junior and Senior High.*

Junior High and Senior High  
(13 through 15 years) and (15 through  
21 years)

### Suggested Materials/Equipment

#### • Self-contained

##### Preschool

- a. Classroom auditory training system
- b. Filmstrip projector
- \*c. Polaroid instant camera
- \*d. 16 mm film projector
- e. Record player
- f. Hal-Hen ear model
- g. Project Life System and filmstrips with hearing impaired earphones
- h. Audio Flashcard Reader/Language Master
- i. Speech mirror
- j. Project Life - PAL viewer
- k. Hearing aid stethoscope
- l. Battery tester
- \*m. Mono or Poly Fonator
- n. Goldman, Lynch Sounds and Symbols 79+
- \*o. Cassette tape recorder
- \*p. Video tape cassette kit and monitor
- q. Overhead projector
- \*r. Film loop projector
- s. Goals kit
- t. Preschool records
- u. Captioned nursery rhyme filmstrips
- v. Perceptual training materials
- w. Art supplies
- x. Rhythm equipment
- y. Educational toys
- z. Literary books

##### Primary

see preschool a-b-c-d-e-f-g-h-i-j-k-l-m-n-o-p-q-r-s-t-u-v-w-x-y-z

30

**Middle**

Telephone Typewriter (TTY)

see preschool a-b-d-g-h-i-k-l-m-o-p-q-r-z

**Secondary**

Individual hearing aids

Telephone Typewriter (TTY)

see preschool b-d-e-f-h-i-k-l-m-o-p-q-r-z

- Resource Room

**Primary**

Individual hearing aids or auditory training system

see preschool b-d-g-h-i-k-l-m-o-q

**Middle**

Individual hearing aids

Telephone Typewriter (TTY)

see preschool b-d-e-g-h-i-k-l-m-o-q

**Secondary**

Individual hearing aids

Telephone Typewriter (TTY)

see preschool b-c-e-f-h-i-k-l-m-o-q

- Itinerant

**Primary**

Individual hearing aids

Speech mirror

Hearing aid stethoscope

Battery tester

Cassette tape recorder

**Middle**

see primary above

**Secondary**

see primary above

**Professional Resources**

Alexander Graham Bell Association for the Deaf  
1537 35th St., NW  
Washington, D.C. 20207

Promotes the teaching of speech and lipreading and works for the full participation of hearing-impaired persons in society. Sponsors a parent organization (International Parents Organization) and publishes the Volta Review.

American Athletic Association of the Deaf  
2015 Wooded Way  
Adelphi, Md. 20783

Fosters and regulates athletic competition among member clubs. Provides special activities of interest to deaf members and their friends. Promotes state, regional, national and world games for the deaf and gives an award for the Outstanding Deaf Athlete of the Year.

Board of Missions, Ministry to the Deaf  
The Lutheran Church  
Missouri Synod  
210 North Broadway  
St. Louis, Mo. 63102

Seeks to meet spiritual, moral, social and cultural needs of the hearing handicapped. Supports a training program for deaf lay assistants. The Lutheran Deaf Missions Society promotes ministry to the deaf in foreign lands.

The Bookstore  
Gallaudet College  
Washington, D.C. 20002

Offers one of the most complete, modern collections of professional and popular literature on deafness, education of the deaf and deaf people. Write for a free book list.

Canadian Association of the Deaf  
56A Wellesley St. E.  
Toronto, Ontario, Canada

Acts as a consultive and coordinating body for associations of the deaf in Canada.

Conference of Executives of American Schools for the Deaf  
6034 Wisconsin Ave., NW  
Washington, D.C. 20016

Promotes the management and operation of schools for the deaf along the broadest and most efficient lines. Also promotes professional growth of all those who work closely with the deaf.

Convention of American Instructors of the Deaf  
5034 Wisconsin Ave., NW  
Washington, D.C. 20016

An association of teachers, administrators and other professionals in North America banded together to promote educational services to the deaf, directly concerned with school-age, hearing-impaired children and the educational facilities provided for them. In conjunction with the Conference of Executives of American Schools for the Deaf, publishes the American Annals of the Deaf (subscription rate \$12.50 a year).

Council for Exceptional Children  
Jefferson Plaza Suite 900  
1411 S. Jefferson Davis Highway  
Arlington, Va. 22202

A national organization representing public, professional and parent interests in children who need special services. An advocate for the rights of exceptional children. Has extensive materials and publications for distribution.

Council of Organizations Serving the Deaf  
101 Clarke Place  
Frederick, Md. 21701

Promotes the best interests of deaf persons through the cooperative efforts of its autonomous organizations. Conducts a yearly forum, in various parts of the country, on themes of current interest in the field of deafness.

Deafness Research and Training Center  
School of Education  
New York University  
New York, N.Y. 10003

Conducts in-depth research on wide range of living, learning and earning problems faced by deaf people. Sponsors training and degree-granting programs for hearing and deaf people, especially to bring services not heretofore offered.

Deafness Research Foundation  
366 Madison Ave.  
New York, N.Y. 10017

Engages in research into the causes and improved means of treating and preventing deafness and other ear disorders. Encourages young scientists to enter the field. Urges regular ear examinations and maintains the Temporal Bone Banks Program for Ear Research.

Ephphatha Missions for the Deaf and Blind  
P. O. Box 713  
Sioux Falls, S.D. 57101

Commissioned to develop a climate of concern in every congregation of the American Lutheran Church for those who face life with a sensory impairment. Develops parish educational materials.

Episcopal Conference of the Deaf  
51 Woodale Rd.  
Philadelphia, Penn. 19118

Organized for strengthening a nationwide ministry to the deaf. Actively involved in working among the deaf in missions and congregations. Maintains an audiovisual library on ministry to the deaf.

Gallaudet College Alumni Association  
7th and Florida Ave., NE  
Washington, D.C. 20002

Seeks to preserve and increase the influence and prestige of Gallaudet College and to extend the sphere of its influence and benefits to those for whom it was established. Most chapters undertake projects of service to the deaf community.

International Association of Parents of the Deaf  
(The Parent Section of the Convention of American Instructors of the Deaf)  
814 Thayer Ave.  
Silver Spring, Md. 20910

A network of parents, professionals and friends serving as a resource center for information to parents here and abroad. Run by parents themselves, IAPD is parents in liaison with adult deaf persons, educators, organizations and government agencies. IAPD is a shopper of books, films, toys and any and all items that might benefit deaf children, a united body seeking improved education and services for both parents and their deaf children. Official newsletter, *The Endeavor*.

International Catholic Deaf Association  
2512 Wedgemere St.  
Pittsburgh, Penn. 15226

Promotes a friendly and cultural bond among the Catholic deaf throughout the world. Maintains a special fund for support of missionary priests in their work with the Catholic deaf. Encourages monthly communion masses in sign language.

John Tracy Clinic  
806 West Adams Blvd.  
Los Angeles, Calif. 90007  
Administrator: Dr. Edgar L. Lowell

Provides a correspondence course for parents of young deaf children throughout the world. Maintains a comprehensive diagnostic and research center on deafness, a day preschool program, guidance and education programs for parents and a training center for teachers of the deaf that is affiliated with the University of Southern California.

Jr. National Association of the Deaf  
Gallaudet College  
Kendall Green  
Washington, D.C. 20002

An organization of, for and by deaf youths with chapters in schools for the deaf throughout the United States, sponsored by the National Association of the Deaf. Objectives are to provide training in citizenship, opportunity to contribute to community growth and a medium for self directed use of potential. Sponsors a youth leadership summer camp at Pengilly, Minnesota.

Kendall Demonstration Elementary School  
Kendall Green  
Washington, D.C. 20002

Operated by Gallaudet College (Public Law 91 587) as an experimental school of national significance. Currently initiating research and development projects aimed at improving the teaching-learning environment of young deaf children.

The Linguistics Laboratory  
Gallaudet College  
7th and Florida Ave., NE  
Washington, D.C. 20002

Applies linguistic theories to communication problems of the deaf. Collaborates with the American Linguistics Society and is supported in part by funds from the National Institute of Health.

Model Secondary School for the Deaf  
Kendall Green  
Washington, D.C. 20002

Operated by Gallaudet College with HEW support. Develops innovative curricula, instructional materials and teaching strategies. Tests and disseminates instructional system and materials proved to be effective in teaching young deaf students.

National Association of Hearing and Speech Agencies  
814 Thayer Ave.  
Silver Spring, Md. 20910

Lay and professional individuals working toward solving the problems of hearing, speech and language handicapped individuals, including the deaf. Organization publishes a journal, *Hearing and Speech News*.

National Association of the Deaf  
814 Thayer Ave.  
Silver Spring, Md. 20910

Primarily deaf people interested in promoting the welfare of the deaf. With approximately 45 state associations and 15,000 members, the oldest national organization of the deaf in America. Halex House serves as head quarters for several agencies serving the deaf and is owned by the NAD. Official publication *The Deaf American*.

National Congress of Jewish Deaf  
9102 Edmonston Rd.  
Greenbelt, Md. 20770

Seeks to aid in the growth and preservation of the religious spirit of the Jewish deaf, also to induce capable deaf men to become candidates for the rabbinate and Jewish laymen to work with the Jewish deaf.

National Fraternal Society of the Deaf  
6701 W. North Ave.  
Oak Park, Ill. 60302

A fraternal life insurance organization, with more than 120 chapters in the United States and Canada, incorporated in 1907 for the primary purpose of insuring deaf persons. Also promotes gainful employment and the welfare of adult deaf persons.

National Technical Institute for the Deaf  
Rochester Institute of Technology  
One Lomb Memorial Dr.  
Rochester, N.Y. 14623

Provides a wide range of information services to parents, professionals, and deaf people. Write to the NTID Office of Educational Extension for information about vocational and technical education programs of national significance.

The Office of Demographic Studies  
Gallaudet College  
Washington, D.C. 20002

Conducts the Annual Survey of Hearing Impaired Children and Youth, sponsored by funds from the National Institute of Education and Gallaudet College. Produces substantive reports on numbers of hearing-impaired children in the United States, degree of deafness, age, achievement level and other characteristics. Write Director, Annual Survey of Hearing Impaired Children and Youth, Gallaudet College, Washington, D.C. 20002

Professional Rehabilitation Workers with the Adult Deaf  
814 Thayer Ave.  
Silver Spring, Md. 20910

Provides services of many kinds to deaf people, particularly after they leave school. Can refer clients to vocational counselors, audiologists, physicians or psychiatrists, and there is no charge for their services. Informs professionals about the deaf community and aids the provision of more and better services to deaf persons. Publishes the *Journal of Rehabilitation of the Deaf* (\$8.00 per year) and *Deafness Annual*, both providing guidance to those interested in the welfare of deaf people.

Project LIFE  
Kendall Green  
Washington, D.C. 20002

Administered by the National Education Association, develops materials to help the severely hearing impaired child in acquiring a functional, receptive language system.

Public Service Programs  
Gallaudet College  
Washington, D.C. 20002

Sponsors conferences and workshops, new services for the deaf, information service for professionals in the field of deafness, speech and hearing, televised news programs, community service centers, and materials development and dissemination.

Registry of Interpreters for the Deaf  
Kendall Green  
Washington, D.C. 20002

By establishing standards and certification, has professionalized the role of the interpreter who can assist the deaf person in many settings such as classroom, medical office, courtroom, church, temple and counseling. Publishes "Interprenews" as a part of *The Deaf American*, official magazine of the National Association of the Deaf.

Sensory Communication Laboratory  
Gallaudet College  
Washington, D.C. 20002

Engages in intensive analysis and description of speech and hearing problems in an effort to improve the use of residual hearing, to clarify speech, and to develop devices which provide better auditory assistance.

Sign Language Programs  
Gallaudet College  
Washington, D.C. 20002

Sponsors a wide range of courses in the sign language from beginning courses to specialized interpreting courses. Also contributes to the systematic development and improvement of total communication.

Teletypewriters for the Deaf, Inc.  
P. O. Box 622  
Indianapolis, Ind. 46206

A nonprofit corporation which coordinates teletypewriter activity through a group of authorized agents. Distributes a directory of teletype users with their addresses and teletype phone numbers.

The Visitors Center  
Gallaudet College  
Washington, D.C. 20002

Operates an open door to Kendall Green and its various programs and is a source of information about the history of education of the deaf, contributions of deaf people to society and current programs serving deaf people of all ages.

Bureau of Education for the Handicapped  
Office of Education  
Department of Health, Education and Welfare  
Washington, D.C. 20203

The official agency of the United States government responsible for administering federal laws which apply to the education of handicapped children.

Closer Look  
Box 19428  
Washington, D.C. 20036

A project of the Bureau of Education for the Handicapped information service established to help parents and others find services for children with mental, physical, emotional and learning handicaps.

Media Services and Captioned Films Branch  
Bureau of Education for the Handicapped  
ROB Building, 7th and D Sts., SW  
Washington, D.C. 20202

Originally established for providing free captioned films to deaf persons of all ages, Media Services and Captioned Films now serves all handicapping areas through a national network of regional and associate Instructional Materials Centers (IMCs), Regional Media Centers for the Deaf (RMCs), Regional Media Center on Educational Media and Materials for the Handicapped at Ohio State University. Also offers the free loan of captioned films (educational and recreational) and other media to any school or organization concerned with hearing handicapped persons. For information and registration, write to Educational Media Distribution Center, 5034 Wisconsin Ave., NW, Washington, D.C. 20016.

National Center for Law and the Handicapped  
1235 North Eddy St.  
South Bend, Ind. 46617

Funded by a grant from the Division of Developmental Disabilities and the Bureau of Education for the Handicapped. Seeks equal rights for all handicapped persons, raising such legal issues as right of treatment and equal educational opportunity recently tested within the judicial system and communicates the information to interested groups and individuals. Gives legal assistance to organizations or individuals who through litigation seek to remedy discriminatory or dehumanizing conditions affecting handicapped persons.

National Institute of Neurological Diseases and Stroke  
Department of Health, Education and Welfare  
Washington, D.C. 20203

Conducts research on the causes, prevention, diagnosis and treatment of the neurological and sensory disorders program aimed at hearing and speech problems, including efforts to remedy hearing loss.

Office of Deafness and Communication Disorders  
Department of Health, Education and Welfare  
South Building, Room 3413  
Washington, D.C. 20201  
Director: Boyce R. Williams

Functions within the Social and Rehabilitation Services of the Department of Health, Education and Welfare  
Maintains direct contact with state vocational rehabilitation programs and with a wide range of state and local programs serving deaf people.

The President's Committee on Employment of the Handicapped  
Washington, D.C. 20210  
Chairman: Mr. Harold Russell

Functions through state committees (often appointed by governors) which encourage the private sector to hire handicapped people and share information about how handicapped people can be employed successfully by business and industry. Holds an annual conference in Washington, D.C. at which time state committees share information concerning the progress of hiring the handicapped, including deaf people.

### Related Services

Related services allow for the development of the total student, supplementing the work of classroom teachers, and promote close cooperation between school and home. Whether a student's need is physical, intellectual, emotional or social, there should be professional personnel available for diagnostic, preventive remedial assistance. A good program for hearing impaired students is characterized by a school team whose services are available whenever needed, and who periodically review the need and provide follow-up services for each student. The ideal team, with the school principal or director of special education as the chairperson, is composed of a pediatrician to evaluate physical needs, an audiologist to assess hearing loss and to prescribe amplification, a psychologist to evaluate intellectual, emotional and social behaviors, a social worker to make visits to the home, a speech and language pathologist to provide individual reinforcement in speech development, a school nurse to care for physical needs resulting from illness or accidents, a counselor to provide guidance services to students and teachers, and other professionals or agencies within the community required to meet particular needs. The services of an occupational or physical therapist may be required to serve the rehabilitative needs of some hearing impaired students.

# Chapter VI

## Program Evaluation

38

35

Program evaluation is vital for determining areas of program strength and weakness. A comprehensive program evaluation will provide helpful information for administrators, teachers, supportive personnel and parents.

Feedback from a variety of personnel, including administrators, teachers, therapists, parents and other staff members, should be an integral part of the evaluation process. The team approach should provide relevant information concerning the effectiveness of general program goals, efficiency in providing comprehensive services and suggestions for improving the program.

The following program evaluation checklist suggests areas that should be considered.

**PROGRAM EVALUATION CHECKLIST: HEARING IMPAIRED**

	All Yes	Some	None No	Unknown NA	Comments
<b>Eligibility</b>					
Children are of legal school age					
All children placed on basis of comprehensive evaluation by licensed otologist, audiologist.					
Students with chronic otology problems have received an evaluation by an otolaryngologist (or other physician) <i>See Program for Exceptional Children, Regulations and Procedures</i>					
Amount of direct services is commensurate with severity of problem. Classification is determined by age of onset, severity of loss, type of loss, educational abilities and presence of other handicaps. <i>See Program for Exceptional Children Regulations and Procedures.</i>					
Written entrance and exit criteria which are clearly delineated.					
<b>Due Process Procedures Followed</b>					
Hearing/vision screening prior to evaluation. Process in place for maintenance of hearing aids.					
Comprehensive evaluation (see "Suggested Outline for Comprehensive Hearing Impaired Evaluation" in appendix).					
Parental involvement in IEP and placement or attempts to involve are documented.					
IEP is complete; only one IEP, reflecting all services, per student.					

	All Yes	Some	None No	Unknown NA	Comments
Placement committee meeting minutes are kept.	1				
Due process forms (all necessary forms are filed and forms have all necessary statements).					
Annual review of IEP.					
Confidentiality procedures are adequate.					
<b>Comprehensive Program and Services</b> A comprehensive program for the hearing impaired is available at the elementary, middle and high school levels (grades K-12).					
Referral system clearly explained to classroom teachers and other special education teachers.					
Early intervention programs for pre-schoolers are planned and implemented.					
Assure that adequate related services are available (Audiology, Speech and Language services).*					
<b>Program Management</b> Caseload within state recommended maximums (self contained—eight; resource—12; itinerant—12; pre-school—six) see <i>Program for Exceptional Children Regulations and Procedures</i> .					
Adequate time allowed for teacher consultation and diagnostic evaluations (suggested equivalent of one-half day per week).					
Indirect services (e.g., in-service, demonstration teaching) provided: maximum of 10 hours of school month recommended. See <i>Program for Exceptional Children Regulations and Procedures</i> .					
Adequate staff development of in-service program.					

	All Yes	Some	None No	Unknown NA	Comments
Program is adequately supervised.					
All teachers of the hearing impaired employed hold valid Georgia teaching certificates.					
A record keeping system is established and maintained.					
<b>Facilities, Equipment and Materials</b>					
Facilities adequate for nature of program.***					
There are adequate materials and equipment appropriate for the age and handicaps of the students in the classes. a. Instructional b. Diagnostic					
<b>Instructional Programs</b>					
Programs for children who are hearing impaired are planned through stated educational objectives which are detailed in the student's individual educational plan;					
teachers of the hearing impaired incorporate assessment information, instructional data in their instructional planning;					
there is evidence that the teacher maintains daily records of student progress through lesson plans or logs.					

\*Sixty percent of the hard of hearing population may need speech therapy. One hundred percent of the deaf population will need speech therapy. (BEH incidence figure)

\*\*An annual comprehensive audiologic evaluation for all hearing impaired or deaf students. A comprehensive audiologic evaluation is suggested for all preschool or parent/infant children.

\*\*\*Self contained or diagnostic classroom (750 square feet) or resource room (350 square feet), easily accessible, located away from undue noise, amplification equipment, room sound treated with carpet and drapes, air conditioned, secure storage, table and chairs, adequate lighting and ventilation. These should be appropriate warning systems for the hearing impaired for emergencies like fire, bomb threat and tornadoes.

# Chapter VII

## Additional Resources

## Directories

"Directory of Services for The Deaf People of Georgia" published by the Georgia Interagency Council on Deafness. Available from Director of Services for the Deaf, Box 395, Cave Spring, Ga. 30124.

"Membership Directory" published by the Georgia Speech and Hearing Association, available from GSHA, P. O. Box 42318, Atlanta, Ga. 30311.

"Directory of Resources for Speech, Hearing and Vision Services in Georgia" published by Maternal and Child Health Unit, Department of Human Resources, Room 365-S, 47 Trinity Ave., Atlanta, Ga. 30334, (404) 656-4830.

## Professional Organizations

It is important that all professional personnel continue their education through in-service education, publications and program development. The following professional organizations provide many of these services.

Alexander Graham Bell Association for the Deaf  
1537 35th St., N.W.  
Washington, D.C. 20207

Promotes the teaching of speech and lipreading and works for the full participation of hearing impaired persons in society. Sponsors a parent organization (International Parents Organization) and publishes the *Volta Review*.

Conference of Executives of American Schools for the Deaf  
5034 Wisconsin Ave., N.W.  
Washington, D.C. 20016

Promotes the management and operation of schools for the deaf along the broadest and most efficient lines. Also promotes professional growth of all those who work closely with the deaf.

Convention of American Instructors of the Deaf  
5034 Wisconsin Ave., N.W.  
Washington, D.C. 20016

An association of teachers, administrators and other professionals in North America banded together to promote educational services to the deaf, directly concerned with school-age, hearing impaired children and the educational facilities provided for them. In conjunction with the Conference of Executives of American Schools for the Deaf, publishes the *American Annals of the Deaf* (subscription rate \$12.50 a year).

Council for Exceptional Children  
Jefferson Plaza Suite 900  
1411 S. Jefferson Davis Highway  
Arlington, Va. 22202

A national organization representing public, professional and parent interest in children who need special services. An advocate for the rights of exceptional children. Has extensive materials and publications for distribution.

Council of Organizations Serving the Deaf  
101 Clarke Pl.  
Frederick, Md. 21701

Promotes the best interests of deaf persons through the cooperative efforts of its autonomous organizations. Conducts a yearly forum, in various parts of the country, on themes of current interest in the field of deafness.

International Association of Parents of the Deaf  
(The Parent Section of the Convention of American Instructors of the Deaf)  
814 Thayer Ave.  
Silver Spring, Md. 20910

A network of parents, professionals and friends serving as a resource center for information to parents here and abroad. Run by parents themselves, IAPD is parents in liaison with adult deaf persons, educators, organizations and government agencies. IAPD is a shopper of books, films, toys and any and all items that might benefit deaf children, a united body seeking improved education and services for both parents and their deaf children. Official newsletter: *The Endeavor*.

Jr. National Association of the Deaf  
Gallaudet College  
Kendall Green  
Washington, D.C. 20002

An organization of, for and by deaf youths with chapters in schools for the deaf throughout the United States, sponsored by the National Association of the Deaf. Objectives are to provide training in citizenship, opportunity to contribute to community growth and a medium for self-directed use of potential. Sponsors a youth leadership summer camp at Pengilly, Minnesota.

National Association of Hearing and Speech Agencies  
814 Thayer Ave.  
Silver Spring, Md. 20910

Lay and professional individuals working toward solving the problems of hearing, speech and language handicapped individuals, including the deaf. Organization publishes a journal, *Hearing and Speech News*.

National Association of the Deaf  
814 Thayer Ave.  
Silver Spring, Md. 20910

Primarily deaf people interested in promoting the welfare of the deaf. With approximately 45 state associations and 15,000 members, the oldest national organization of the deaf in America. Halex House serves as headquarters for several agencies serving the deaf and is owned by the NAD. Official publication. *The Deaf American*.

Registry of Interpreters for the Deaf  
Kendall Green  
Washington, D.C. 20002

By establishing standards and certification, has professionalized the role of the interpreter who can assist the deaf person in many settings such as classroom, medical office, courtroom, church, temple and counseling. Publishes "Interprenews" as a part of *The Deaf American*, official magazine of the National Association of the Deaf.

Bureau of Education for the Handicapped  
Office of Education  
Department of Health, Education and Welfare  
Washington, D.C. 20203

The official agency of the United States government responsible for administering federal laws which apply to the education of handicapped children.

Georgia Educators of the Hearing Impaired. Information concerning membership may be obtained by contacting GEHI, 155 Lakeview Ave., Atlanta, Ga. 30305. A newsletter is published and a conference is held annually.

#### State and Community Resources

Georgia Department of Education  
Program for Exceptional Children  
State Office Building  
Atlanta, Ga. 30334  
(404) 656-6317

Contact:  
Consultant, Speech and Language Impaired,  
Consultant, Audiology and Hearing Impaired

Georgia Learning Resources System  
Georgia Department of Education  
Program for Exceptional Children  
State Office Building  
Atlanta, Ga. 30334  
(404) 656-2425

### Georgia Library Information

Division of Public Library Services  
Georgia Department of Education  
156 Trinity Ave., S.W.  
Atlanta, Ga. 30303

### Teacher Certification

Teacher Certification Services  
Georgia Department of Education  
State Office Building  
Atlanta, Ga. 30334  
(404) 656-2406

### Licensure

Board of Examiners for Speech Pathology and Audiology  
166 Pryor St., S.W.  
Atlanta, Ga. 30303  
(404) 656-6719

Georgia Center for the Multihandicapped  
1815 Ponce de Leon Ave., N.E.  
Atlanta, Ga. 30307  
(404) 378-5433

Contact: Stephanie Dirst, Director

Provides medical, educational and psychological assessments and specific recommendations for the handicapped. Serves children ages two through 18 years suspected of having more than one handicap.

Contact your local GLRS for referral information.

TIE LINE Information and Referral System  
Office of Consumer Affairs  
618 Ponce de Leon Ave., N.E.  
Atlanta, Ga. 30308  
1-800-282-4900

Adult Health Services  
Department of Human Resources  
618 Ponce de Leon Ave., N.E.  
Atlanta, Ga. 30308  
(404) 894-5804

Child and Maternal Health Unit  
Department of Human Resources  
Room 364-S  
47 Trinity Ave.  
Atlanta, Ga. 30334  
(404) 656-4830

### College and Universities

Georgia State University  
Dr. Oliver Hurley, Chairperson  
Department of Special Education  
Atlanta, Ga. 30303  
(404) 658-2543

Offers B.S., M.Ed., in Deaf Education/Hearing Impaired.

University of Georgia  
Dr. Kathryn Blake, Chairperson  
Division for Exceptional Children  
570 Aderhold Hall  
Athens, Ga. 30602  
(404) 542-1685 Ext. 31, 33, or 34

Offers M.Ed. in Education of the Hearing Impaired.

Valdosta State College  
Dr. Leo Kelly, Chairperson  
Special Education Department  
Valdosta, Ga. 31601  
(912) 247-3270

Offers basic coursework for T-4 Certification in Deaf Education.

West Georgia College  
Dr. William Moeny, Chairperson  
Department of Education  
Carrollton, Ga. 30117  
(404) 834-1332

Offers graduate level coursework for T-5 Certification in Education of the Hearing Impaired.

## Centers for Severely Emotionally Disturbed (Psychoeducational Center Network)

The SED centers are multidistinct programs designed to serve a low incidence population. The projected population for SED is one half of one percent (.005%) of the population, ages zero through 16. There are currently 24 centers, each with satellite services, providing non-residential, community-based services including diagnostic educational, psychological and psychiatric assessment; remedial services such as special education classes, individual and/or group therapy and parent services.

Each center is responsible for serving children, ages zero through 16, who are severely disturbed or behaviorally disordered. The major admission requirement will be the presence of an emotional or behavioral disorder severe enough to require a special child treatment program or a special education program not available in the public school or community. Children who are mild to moderate behavior problems or discipline problems are not eligible. These children are characterized by

- (1) severe emotional disturbance such as, but not limited to, childhood schizophrenia, autism, severe emotional deprivation and adjustment reactions,
- (2) severe behavioral disorders such as, but not limited to, neurological impairment, cultural deprivation and developmental,
- (3) severe school-related maladjustment such as, but not limited to, behavior, socialization communication and academic skills.

At all centers, referrals will be accepted from, but not limited to, early childhood programs, private day care programs, community service centers, well baby clinics, kindergartens, public schools, parents and other child-serving agencies and physicians.

For additional information, contact the State Coordinator, Centers for Severely Emotionally Disturbed, Georgia Department of Education, State Office Building, Atlanta, Ga. 30334 or call (404) 656-6317.

### What Services Does GLRS Provide

GLRS maintains an instructional materials center where special educators can preview and borrow materials. The collection includes diagnostic materials, teacher training and professional materials and child use instructional materials. Materials are loaned on a short-term basis to provide educational intervention for particular children, to be used by teachers for trial or preview or to help facilitate selection and purchase decisions.

GLRS provides in-service training through workshops and conferences on effective use of media and educational equipment, new teaching techniques and methods and innovative instructional materials. Every effort is made to provide workshops which directly relate to the identified needs or interests of each school system.

GLRS maintains a video-tape collection of outstanding special education workshops which have been conducted throughout Georgia. In addition, exemplary special classrooms can be videotaped. These tapes may be borrowed for workshops, in-service meetings or individual previewing.

GLRS sponsors various special projects to introduce innovative ideas and materials being used successfully with exceptional children across the nation. The Select-Ed Prescriptive Materials Retrieval System, Computer-Based Resource Units (CBRU), Educational Research Information Center (ERIC), Materials Analysis and Retrieval System (MARS) and the Master-Teacher Model are some of the educational innovations which GLRS has introduced to Georgia educators.

GLRS acts as an information interchange network. Information is disseminated to special educators about the various areas of exceptionality, about programs and services offered to exceptional children in Georgia and about meetings and conferences of interest to special educators.

GLRS provides information and referral for diagnostic services and educational planning for the severely handicapped child.

# Chapter VIII

## State Schools

## Summary Sheet

There are three state operated schools for exceptional children. They are the Georgia School for the Deaf, located in Cave Spring, Georgia, the Georgia Academy for the Blind located in Macon, Georgia and the Atlanta Area School for the Deaf located in Clarkston, Georgia.

The Georgia School for the Deaf is a residential program serving deaf children kindergarten through twelfth grade. For further information and application procedures call (404) 777-3310 or write

Superintendent  
Georgia School for the Deaf  
P. O. Box 98  
Cave Spring, Ga. 30124

The Georgia Academy for the Blind consists of two campuses. The Vineville Campus is a residential setting serving visually impaired children grades kindergarten through twelfth.

The Shurling Campus is a residential setting for multiply handicapped ages five through 21. For further information regarding either campus call (912) 744-6083 or write

Superintendent  
Georgia Academy for the Blind  
2895 Vineville Ave.  
Macon, Ga. 31204

The Atlanta Area School for the Deaf is a day program serving the Metro Atlanta area. Currently, pre-school through tenth grade children are being served. For information on the Atlanta Area School for the Deaf call (404) 656-7077 or write

Superintendent  
Atlanta Area School for the Deaf  
890 N. Indian Creek Dr.  
Clarkston, Ga. 30021

The State Schools are administrated by the Office of State Schools and Special Services, Mr Peyton Williams, Jr Associate Superintendent,

# State Schools for the Handicapped

## Introduction

The Georgia Board of Education was given the power of operation and management of the state schools for the handicapped on July 1, 1943 by legislative enactment. Due to the low incidence in the population and the severity of the handicapping conditions, there has been and continues to be a need for residential and day facilities for these hearing impaired and visually impaired children in the state. These facilities are the Georgia Academy for the Blind, the Georgia School for the Deaf and the Atlanta Area School for the Deaf. The primary purpose for the establishment of these state schools was to provide special education services that could not be provided by or preceded local education agencies' programs.

Instruction, room and board and routine nursing care are furnished free for all children enrolled at the Georgia Academy for the Blind and the Georgia School for the Deaf. Parents are responsible for major medical needs, personal expenses and clothing. The Atlanta Area School for the Deaf is a nonresidential school. The state schools for the handicapped receive federal funds through Title I, Title IV and Title VI-C of the Elementary and Secondary Education Act, and Title III of the Comprehensive Employment and Training Act.

Although the ultimate responsibility for each students' Individual Education Plan lies with the local education agency, the three state schools for the handicapped have assumed the initiation of these plans. The initial IEPs were written in the spring and summer of 1977 for all enrolled students. New students' IEPs are written at the time of the special education placement committee meeting or shortly thereafter. The LEAs and parents are invited to attend these IEP meetings and special education placement committee meetings to provide information, ask questions and otherwise help in planning for free appropriate public education for these handicapped children. These meetings are held on the campuses of the schools or held in or close to the LEA and the child's home. If the LEA's representative or the child's parents cannot attend, the IEPs are mailed out inviting comments. The IEPs are updated quarterly at all schools with a special emphasis on the annual review in the spring of each school year. All due process procedures and confidentiality assurances are adhered to at the state schools for the handicapped.

Many of the handicapped children enrolled in the state schools are being served by other agencies as well as the department of education due to multihandicaps, environmental condition, or previous and future placement. In providing a free appropriate public education and recognizing the child's needs on a 24 hour basis, the state schools are constantly communicating and planning with a variety of community or state agencies such as the Department of Human Resources (DHR), the Department of Offender Rehabilitation and the Department of Vocational Rehabilitation, Crippled Childrens Services, local public health nurses, Goodwill Industries, private physicians and residents of local communities by the state schools for the handicapped. These include

- preservice training for teachers
- in-service training for teachers
- in-service training for paraprofessionals
- courses in manual communication
- consulting visits
- educational, psychological and audiological diagnostic and evaluation services
- parent counseling services
- meeting facilities for professional groups and parent groups
- referral sources for hearing impaired and visually impaired adults
- communication with the adult deaf population
- communication with colleges and technical schools serving hearing impaired and visually impaired population
- resource centers for professional materials and media, on the hearing impaired and visually impaired population

As the population of the state schools changes and LEA programs grow, the state schools for the handicapped will be providing a variety of additional services to the LEAs. Speculation on these services suggests that these schools could provide learning resource centers, demonstration schools and community continuing education centers for the handicapped.

As the LEAs develop more specialized programs to meet the needs of the hearing impaired and visually impaired school aged children, the population of the state schools is changing. The state schools plan to provide programs for the more severely involved multihandicapped students whose needs cannot be met in the LEAs. The placement will be made based on the handicap of hearing impairment or visual impairment at the school with the appropriate services. Therefore, a lower teacher pupil and aide pupil ratio will be needed as well as additional ancillary services.

Due to the changing role of residential schools and the impact of P. L. 94-142 on LEAs, money has been appropriated for an in-depth study of all of the state schools. The projected outcomes of the study would include the role and responsibilities of the schools for the handicapped in regard to

accepting profoundly handicapped students - which handicapped children should be placed at these schools and which students should be placed in public schools or DHR facilities.

teacher training facilities.

diagnosis and evaluation for in-house students and cooperative agreements with public schools for these services.

placement of severely multihandicapped students.

curriculum and educational programs

resources to public school programs throughout the state.

Even though many LEAs are providing excellent programs for hearing impaired and visually impaired children, there are still those handicapped children for whom a residential or day school program is the least restrictive environment. The state schools working together with LEA representatives, parents and advocacy groups can determine and provide the most appropriate placement for these handicapped children

#### THE GEORGIA ACADEMY FOR THE BLIND

2895 Vineville Ave

Macon, Ga. 31204

(404) 744-6083

Richard Hyer, Superintendent

The Academy for the Blind consists of two campuses. The Vineville campus is a residential setting serving visually impaired students grades kindergarten through twelfth. The Shurling campus is a residential setting for multiply handicapped students ages five through 21

For further information on history and programs available, please refer to the Georgia Department of Education Resource Manual for the Visually Impaired (Volume V) or the Resource Manual for the Deaf/Blind (Volume XI)

#### GEORGIA SCHOOL FOR THE DEAF

Post Office Box 98

Cave Spring, Ga. 30124

(404) 777-3310

J H Whitworth, Superintendent

The Georgia School for the Deaf, located in Cave Spring, Georgia was established in 1846. This school provides a residential program for about 500 deaf and hearing impaired children yearly. The school maintains a preschool through high school program.

The Georgia School for the Deaf provides complete audiological, educational and psychological diagnostic and evaluative services for all enrolled students. A full range of educational instruction is offered with academic emphasis on developing communication and language skills through use of the total communication concept. Audiological instructional amplification equipment is provided in most classrooms.

One of the most important aspects of the educational services for hearing impaired and deaf children is the career development component. At the Georgia School for the Deaf, the career education program offers career exploration, prevocational training and vocational preparatory training in the fields of transportation, which includes auto mechanics, body and fender work, metal lab, which includes sheet metal, machine shop work and welding, graphics, which includes photo offset lithography and direct printing, construction, which includes carpentry, masonry and electricity, industrial power sewing, industrial upholstery, warehouse management, health occupations, and business and office education. This program has available a vocational media library, consumer education courses and driver education courses.

A new diagnostic and evaluation center opened this year to provide services to both prospective and currently enrolled students. Educational placement and prescriptive Individual Educational Program recommendations are special services of the center.

Complete audiological services are provided including initial and annual audiological evaluations, on-going hearing aid evaluations and training, in service programs for teachers and houseparents regarding hearing aid care and maintenance, maintenance of the auditory training equipment and special programs for auditory training and speech reading activities.

Cultural enrichment activities such as field trips, movies and athletic contests serve as a basis for reading and language development. Counseling services for individual hearing impaired or deaf students and their parents, nursing care and emergency medical and dental care services are provided.

- Criteria for admission for hearing handicapped children to the Georgia School for the Deaf are

hearing loss in the better ear of not less than 60 decibels, a diagnosed discrimination type loss, a borderline loss which is diagnosed progressive in nature or a condition in which a combination of factors occur that results in the prospective student demonstrating inability to make progress in his or her local education agency due to hearing loss.

parents or guardians must be residents of Georgia.

the prospective student can profit (learn) from the academic or career education program offered.

the prospective dorm student has attained the age of five by September 1 of applicable school year and is not older than 21 years of age by scheduled graduation time.

the prospective day student has attained the age of two by September 1 of applicable school year.

- Criteria for admissions to the proposed program for multihandicapped students at the Georgia School for the Deaf

Hearing loss in the better ear of not less than 60 decibels, or a diagnosed discrimination type loss, or a borderline loss which is diagnosed progressive in nature, or a condition in which a combination of factors occur that results in the prospective student demonstrating inability to make progress in his or her local education agency due to hearing loss.

Parents or Guardians must be residents of Georgia.

The prospective student can benefit from the program offered.

The prospective dorm student has attained the age of five by September 1 of applicable school year and is not older than 21 years of age.

The prospective day student has attained the age of two by September 1 of applicable school year.

- Other factors to be considered

Whether the student's educational, social, vocational and emotional needs can be met by the prospective student's local educational agency.

Available space and staff to provide services

After an initial period of diagnostic teaching is complete, (typically six months to one year), the admissions committee will recommend continuance or termination of services for the student

- Admissions procedures for the Georgia School for the Deaf

Contact superintendent's office, Georgia School for the Deaf.

Application for admission forms will be forwarded.

Applicant's parents complete forms and return to school.

Admissions committee meets and screens applications.

If admission committee's decision is "eligible," then applicant will be contacted to arrange a mutually convenient time for an interview in Cave Spring. If the decision is "ineligible," an appeal may be made directly to the superintendent. Further appeals may be made to the director of state schools. This is also true if there is an "ineligible" ruling after the personal interview.

LEA will be notified and invited to attend placement committee meetings and IEP conferences.

Following the personal interview, the application will be "staffed" and the applicant will be notified in writing, and a date for reporting to school will be given. Specific information concerning rules, placement, homegoing, student bank and discipline will be delivered and confirmed.

A final "entry conference" will be held on the enrollment date and any questions resolved.

All applicants are considered on trial for at least six weeks. During this time, the staff will evaluate the school's ability to provide a program for the student. Also during this time, the IEP will be revised as needed and parents advised. Parents will be informed in writing of acceptance on a permanent status. Parents will also be called, if necessary, to come and assist with the adjustment process.

The Georgia School for the Deaf participates in the Georgia High School Association programs which includes literary events, drama, football, basketball, track, tennis and softball. The lower school students participate in the Floyd County Recreational League which includes track and basketball.

The program of the Home Life Department assumes day-to-day responsibility for the care of the students including food-service, houseparent staff, laundry service, recreational programs and continued communication training, with emphasis on developing skills in the activities of daily living, self-care and personal hygiene.

The school offers continuing staff developing programs in total communication and current trends and improvements in the education of the hearing impaired and deaf. Preservice and in-service training in conjunction with college and universities for teachers of the hearing impaired is available.

#### ATLANTA AREA SCHOOL FOR THE DEAF

890 N. Indian Creek Dr.

Clarkston, Ga. 30021

(404) 656-7077

Mona McCubbin, Superintendent

The newest state school for the handicapped is the Atlanta Area School for the Deaf located in Clarkston, Georgia. Consideration was given to the number of hearing impaired students in the metropolitan Atlanta area (33% of all the hearing impaired school aged population in the state) and a study was done considering the feasibility of establishing a day school to serve these children. The Atlanta Area School for the Deaf began operation in 1972 on a day-school basis for moderate and severe hearing impaired and deaf children. This school serves approximately 250 metropolitan Atlanta area students yearly.

The Atlanta Area School for the Deaf works in cooperation with the public school districts in the metropolitan Atlanta area to provide comprehensive educational programming. All public school districts presently employ teachers and have programs for the hearing impaired that serve students who have some residual hearing or are deaf and able to function in a regular public school classroom. Students needing other special education facilities are referred to Atlanta Area School for the Deaf. This procedure allows for alternative programs to meet the individual differences of hearing impaired students from this area. Referrals to the Atlanta Area School for the Deaf must be made through the child's LEA. Some students may be referred to the Georgia School for the Deaf depending upon age and environmental situations which require their placement out of the home.

At present the school includes programs for parent infant training for children from birth through age two, a pre school program for children ages three through five, an elementary program for children ages six through 15. The master plan for the Atlanta Area School for the Deaf envisions the addition of a high school program to prepare hearing impaired and deaf students for entrance into higher education facilities or career placement.

The essential function of the Atlanta Area School for the Deaf is to help the hearing impaired student become a self-sufficient, accepted and actively contributing member of society. The school recognizes that each hearing impaired child is a unique person having innate individual characteristics with the potential for growth and development the same as any hearing child. In order to meet the needs of each child, the school uses the latest techniques and methods including a comprehensive IEP, individualized instruction, programmed learning systems, team teaching, open classrooms and other up to date educational media and materials. Education and training encompass subject areas such as mathematics, reading, science, social studies, rhythm, physical education, health, safety and art. Communication skills (speech, speech reading, auditory processing, sign language, finger spelling, lipreading, natural gestures and amplified residual hearing) receive great emphasis throughout the entire program. Language development is the core of the educational program as hearing impaired and deaf children do not develop adequate language without special training.

The parent infant program at the Atlanta Area School for the Deaf specializes in services for the child with a hearing impairment in the first three years of life. The activities of the program are planned to develop the following skills: gross, fine and perceptual motor improvement, auditory training, pre speech, language, cognition and socialization. Total communication is used with all children which allows for flexibility in the individualization of each child's communication training. The program of Atlanta Area School for the Deaf centers on both the child and his parents. The parents are counselled in coping with emotional problems and feelings they may have about their child, his handicap and the resulting changes in their lives. They are also totally involved in the educational program that must be conducted at home during the early years of development. The parent-infant activities include

home visits

infant stimulation class which involves parents together in a parent training session with their child,  
prenursery class for toddlers which includes orientation to school and socialization with peers,  
mothers' group, fathers' group, combined parents' group and grandparents' group,  
sibling sign language class,

audiological evaluations and early hearing aid orientation which provides a firm foundation for the hearing impaired child's optimal use of residual hearing and related speech and language growth.

The diagnostic and evaluation clinic of the Atlanta Area School for the Deaf provides appropriate and comprehensive diagnostic, evaluation, educational and referral services for hearing impaired children birth to 21 years of age in the metropolitan Atlanta area. This clinic also provides

family counseling services and training to parents of hearing impaired children,

diagnostic and evaluation services for multihandicapped children,

dissemination of services and activities of the clinic to professionals, paraprofessionals, pediatricians, physicians, health departments, lay groups, parents and the general public,

in service to professionals and paraprofessional personnel working with hearing impaired or exceptional children in college and university settings, local education agencies, social services or health and medical settings.

## Preschool — Early Childhood

### Rationale

For hearing impaired, visually impaired and sensorily multihandicapped children and their families, it is essential that educational and counseling services are offered from birth through entrance into any educational program. These preschool programs may vary in each state school, but will consist of but not be limited to parent-infant programs, parent training programs, preschool classes, home visits, group parent meetings and continuous diagnosis and evaluation.

### Objectives

Partnership with LEAs, to provide a mechanism for identification and referral at birth of high risk and sensorily handicapped infants.

To develop and provide parent-infant programs and preschool programs for services to the child and his parents. (Special emphasis is placed on amplification and language development in preschool programs for the hearing impaired population.)

## Curriculum

### Rationale

The curricular needs of the children at the state schools would not differ greatly from the curricula described for the hearing impaired, visually impaired or multihandicapped population in the LEAs or from that offered to non-handicapped children with adaptations. However, additional and related teaching services may be provided through the state schools that are not available in the LEA. For example, the state schools for the handicapped emphasize career development for all students, work experiences and a variety of vocational educational programs specifically designed for hearing impaired or visually impaired students. As with other exceptional children, the curricula for the hearing impaired or visually impaired should be dependent upon each child's individual needs, specified and agreed upon in the Individual Education Plan. Curriculum emphasis will change depending upon the types of program, class placement in preschool, elementary, middle or secondary programs or level of functioning of the child. A variety of modalities of instruction will continue to be used in all programs.

Curriculum development is an integral part of the activities in the state schools. Funds need to be set aside for the continuation of curriculum development in specialty areas such as auditory processing, mobility training and social and personal development. These special curriculum guides will serve as a resource to LEAs and other facilities serving the hearing impaired and visually impaired throughout the United States.

### Objectives

To provide appropriate curricula as indicated by the IEPs for all handicapped children enrolled in the state schools.

To develop appropriate curricula for hearing impaired and visually impaired children in specialty areas.

# Appendix A

## Glossary of Terms

**Acoustic feedback** — Commonly recognized as an unpleasant whistle or shrill noise which comes from a hearing aid when the volume is on. This unpleasant noise may occur if the sound which a hearing aid is delivering into the ear through an earmold or earphones escapes and is picked up by the microphone. Suggested ways of avoiding feedback are checking earmold or earphones as to fit (children may require new earmolds every six to nine months depending on their rate of growth), moving the body of the hearing aid which contains the microphone away from the earmold or earphone; and lowering hearing aid volume control.

**Air conduction** — Use of the outer and middle areas of the ear for transmission of sound to the inner ear

**Air-conduction receiver** — A device for transforming electric energy from the hearing aid into sound which is directed through an earmold to the ear canal. An air-conduction receiver is preferable to a bone-conduction receiver which is placed on the mastoid unless there is a medical problem which would interfere with the safe and comfortable use of an earmold inserted into the ear canal.

**Audiogram** — A graph that provides a picture of the amount of hearing for pure tones. The hearing level is recorded in decibels (loudness) for each frequency (pitch) tested.

**Audiology** — A profession as well as an area of knowledge that involves the science of hearing

**Audiometer** — An instrument for determining how much the ear under test differs from standards established on a group of normal hearing listeners. The difference is expressed as a ratio in decibels (loudness) for each frequency (pitch) tested. Frequencies commonly tested are 250 cps, 500 cps, 2000 cps, 4000 cps, 8000 cps

**Audiometry** — The measurement of hearing through use of a variety of tests designed for this purpose

**Clinical audiologist** — An individual qualified to administer hearing tests and, if indicated, make recommendations concerning the use of hearing aids.

**Decibel (db)** — In the field of hearing, the decibel has no absolute value but indicates the ratio by which one level of sound is greater or less than another. The reference levels for hearing are most commonly established upon normal hearing listeners.

**Frequency** — Sound may be analyzed as to the number of vibrations per second caused by the sound producing mass. The rate of vibration is measured in cycles per second (cps) and expressed as frequency. As the frequency band assumed as necessary for understanding speech is a range from 400 cps through 3000 cps

**Functional hearing loss** — A hearing impairment which is the result of psychological problems rather than of those involving the anatomy of the auditory pathway. There is no physiological basis for this hearing impairment

**Hearing aid** — An instrument which, through some means of amplification, brings sound more effectively to the listener's ear. Pre-electronic hearing aids used to consist of listening tubes or horn type devices which focused sound into the ear. Current hearing aids are electric and receive the power needed for amplification from batteries or electric wall plugs. There are three major types of electric hearing aids: wearable or individual hearing aids, desk types and group training units designed for use in the classroom by several children.

Electric hearing aids have four major components, microphone designed to receive sound and change it into electric signals, source of power, amplified signal back to sound for reception by the listener.

**Hearing aids (wearable types)** — Monaural, a single hearing aid containing a microphone, amplifying system, cord, receiver and batteries. These aids are different sizes and, depending on the power required, may be worn on either the head or the body. Binaural, two hearing aids worn at the same time. These aids may be separate units or contained in a single case. Binaural aids contain two microphones, two amplifying systems, two cords, two receivers and batteries. Semibinaural or pseudobinaural, a single hearing aid which has a Y cord worn with a receiver in each ear. This hearing aid has a single microphone, amplifying system, a Y cord which directs sound to each ear, two receivers and batteries.

**Hearing aid control** — Most individual or wearable hearing aids have some provision for giving emphasis to the low, high or full range of tones according to the individual needs of the listener. This adjustment is made through the receiver and/or through an internal adjustment within the hearing aid

**Hearing aid volume control (gain control)** — Makes possible an increase or decrease in amount of amplifications of sounds reaching the listener's ear. This control on most hearing aids is designed for easy adjustment by the listener

## **Hearing loss (hearing impairment)**

Classified as to Structure of the Ear Involved

**Conductive Hearing Loss** — Result of reduced conduction of sound through the outer and/or middle ear to the inner ear. Function of the neural system is not involved. This type of hearing loss is primarily a medical problem, which, in the majority of cases, can be cleared by treatment.

**Sensory-Neural Hearing Loss** — Hearing problems which involve the inner ear and/or the central nervous system. This type of hearing loss is often referred to as nerve deafness. These hearing impairments cannot be cleared by medical treatment but may be partially compensated for through special education and use of amplification.

**Mixed Hearing Loss** — A combined conductive and sensory-neural component which can be partially compensated for through special education and use of a hearing aid.

Hearing losses are classified into four categories — mild is defined as one that shows a pure tone average of 25-35dB (ANSI), moderate, a pure tone average of 35-45dB (ANSI), severe, a pure tone average of 50-65dB (ANSI); and profound, a pure tone average of 65-95+dB ANSI).

Time of Onset

**Adventitiously Deaf** — The child or adult born with normal hearing, who acquires a severe or profound hearing impairment through illness or an accident. The later the time of onset of deafness, the more likely he will be able to retain patterns of communication learned through the auditory avenue.

**Congenital Hearing Loss** — A hearing impairment which exists at time of birth. The term does not refer to the cause of the hearing problems, but is related only to time of onset.

## **Hearing tests for children**

**Informal Tests of Hearing** — Sounds in the form of voice, pure tone, music or noisemakers are presented at controlled intensity levels in the room where the child is being observed. The child's responses to this variety of sounds are observed and recorded by the examiner. These tests are administered to the child who is either too young or unable to learn any of the usual methods of making a consistent observable response to sounds that are necessary for formal tests of hearing.

**Formal Tests of Hearing** — The child is taught to make consistent responses to pure tone or speech by means of a game response with a toy or hand signal. Based on the child's responses, thresholds of hearing levels may be established for a full audiometric test. Tests that require the child's response to speech may also be conducted.

**Electrophysiological Tests of Hearing** — The child's responses to sound are observed as changes in the electrical resistance of the skin or as changes in the electrical patterns of the brain as detected by electrodes placed on the body. The tests that reflect the changes in the skin resistance are often referred to as Psychogalvanic Skin Response (PGSR), Galvanic Skin Response (GSR), Electrodermal Response (EDR). Objective tests of hearing that use the electric signals from the brain are often referred to as Electroencephalic Response (EER), Electroencephalic Audiometry (EEA). With the advent of computers many other approaches are being investigated in research centers throughout the world.

**Inner ear** — A series of chambers and snail like coiled channels which are filled with fluid. Located in the inner ear is the sense organ for hearing (cochlea) and the sense organ for balance (semicircular canals). The inner ear is the area in which sound is changed into an electrical code which is carried by the neural system to the brain.

**Intensity** — A measure of the quantity of sound energy. In the field of audiology, intensity is generally expressed in decibels and reported by the listener as a certain level of loudness.

**Loudness** — A quality of sound that enables the listener to judge sounds in terms of an intensity scale which may range from that which is barely heard to a level of discomfort (contrast intensity).

**Middle ear** — An air filled cavity which is enclosed on the outer side by the eardrum and on the inner side by the eardrum and on the inner side by the oval window. The eustachian tube provides a connection between the middle ear cavity and the back of the nasal cavity through which changes in air pressure on the eardrum may be equalized. Within the middle ear are the three small bones (ossicles) that function as a chain, conducting sound

from the eardrum to the inner ear. These bones, as they extend inwards from the eardrum are hammer (malleus), anvil (incus) and the stirrup (stapes).

**Organic hearing loss** — a hearing impairment caused by damage to, or abnormal development of, the auditory pathway.

**Outer ear** — Refers to the external ear and the ear canal. The ear canal is a tube-like opening which extends towards the center of the head for less than an inch to the eardrum (tympanic membrane).

**Pitch** — A quality of sound by which the listener judges sounds on a scale from low to high (contrast frequency)

**Reference:**

Rushford, Georgna, *A Glossary of Terms Relating to Children With Hearing Problems.*

f

# Appendix B Assessment Instruments for Hearing Impaired

Though intellectual functioning falls within the same ranges for the hearing impaired child as it does for the child with normal hearing, the number and types of assessment instruments which can be used to measure the intellectual skills and potential of a hearing impaired child are restricted and often require different administrative techniques and different interpretation of the obtained results. The use of verbal scales to measure intellectual functioning of hearing impaired children is not recommended.

Suggested modifications in the use of the Wechsler Scales pertain to the administration of the Performance Subtests (*The Psychology of Deafness*, by Edna Levine). Two suggested changes are as follows.

**Picture Completion Subtest** — Disposable booklets be made containing each stimulus picture, enabling the child to fill in the missing part or graphically indicate (circle, check) the area of the missing part on each picture

**Picture Arrangement Subtest** — The use of three common or novelty pictures depicting a simple occurrence or action which the child must place in sequence. The sequence of action should be easily identifiable by the child

Although some intelligence tests need modification when evaluating the hearing impaired child, two intelligence tests which do not require changes are the Leiter International Performance Scale and the Hiskey-Nebraska Test of Learning Aptitude, revised 1966. However, past experience has shown that the Leiter IQ, after correction, still tends to be somewhat lower than IQ's obtained on the Wechsler Scales.

Of the two group intelligence tests listed below (Revised Beta Examination and the Chicago Non-Verbal Examination), only the Chicago Non-Verbal Examination needs modification in presentation. Demonstration item #8 of Test Six can be cut from the Protocol (4 pieces) and used as a demonstration item by the examiner

The important point to stress is that, for the hearing impaired, all test directions must be presented in a graphic, visual manner. Accepted forms of presentation include the use of such visual aids as

graphic presentation by examiner on a chalkboard.

use of overhead projector for demonstration.

use of relevant manipulative items by the child to prepare him or her for the task.

task demonstration in such a manner so as not to compromise the validity of the test.

**Name of Instrument** — Wechsler Preschool and Primary Scale of Intelligence (Performance items)

**Available Through** — The Psychological Corporation.

**Reliability and Validity** — Excellent

**Publisher's Comments** — Ages (four through six and one-half) Intelligence Test

**Strengths** — Well standardized. Well known. Accepted by all programs for the hearing impaired

**Adaptions** — Simple picture sequence for picture arrangement for demonstration of directions Printed pictures for picture completion subtest.

**Name of Instrument** — Wechsler Intelligence Scale for Children - Revised Performance Scale

**Available Through** — Psychological Corporation

**Description** — Intelligence test - Performance subtests. picture completion, picture arrangement, block design, object assembly, coding mazes. Manipulation of materials. Score reported as IQ.

**Reliability and Validity** — Reliability .90 (Performance Scale). Coefficients of correlation of scaled scores and IQs on the WISC-R with Stanford-Binet at four age levels, range from .26 to .69.

**Publisher's Comments** — Six through 16 years of age.

**Strengths** — Applicable to hearing impaired children. Scaled scores, test ages from raw scores Good interest appeal, easy to administer.

**Weaknesses** — Some need for verbal instructions.

**Adaptions** — "Sample tasks" before going into subtest.

**Name of Instrument** — Wechsler Adult Intelligence Scale (Performance Scale)

**Available Through** — Psychological Corporation

**Description** — A group of five nonverbal subtests on which the subject is required to manipulate materials ranging from the reproduction of block designs to the rapid matching symbols to numbers.

**Reliability and Validity** — Reliability ranges from .93 for ages 18-19, to .94 for ages 45-54. Validity: Knox, Grotelwesch & Stogren (1968) reported a correlation of .78 between composite learning topic scores and WAIS Full Scale Scores. They concluded that the WAIS is a very useful tool for research and evaluation related to adult learning.

**Publisher's Comments** — Intelligence Test (ages 16 and up)

**Strengths** — Well standardized. Well known. Accepted by all programs for the deaf.

**Adaptions** — Simple picture sequence for picture arrangement subtest. Printed pictures for picture completion subtest.

**Name of Instrument** — Leiter International Performance Scale (1959) Ages two through 16.

**Available Through** — Stolting Company

**Description** — Nonverbal scale for measuring general mental ability, consists of response frame to which examiner attaches card that contains pictures. Subject is presented with set of blocks, which also make pictures and which subject must place in correct stalls to receive credit. Test yields an MA score and a ratio IQ

**Reliability and Validity** — Reliabilities generally in .90s. Validities mostly in .60s and .70s.

**Publisher's Comments** — Speech and auditorily handicapped. illiterates, foreign born, educationally deprived

**Strengths** — Reaches lower CA levels. Subject given trials before administration of the test items. Test of ability to learn rather than what is already learned. Instructions can be pantomimed. No time limit on tasks. Can be administered without use of language.

**Weaknesses** — IQ is five to six points lower than Wechsler Scale IQs. Lack of adequate norms. Ceiling tedious to reach. Description of groups comprising standardization samples inadequate.

**Other Assessment Techniques Necessary** — Care must be taken in interpreting IQ scores.

**Name of Instrument** — Hiskey-Nebraska Test of Learning Aptitude, revised 1966.

**Available Through** — Union College Press, Lincoln, Nebraska.

**Description** — Subtests are of familiar type, i.e., paper folding, spatial reasoning, memory tests and picture analogies. Scores reported in IQs and learning ages.

**Reliability and Validity** — Concurrent Validity — S-B (ages 3-10)  $r = .86$ ; S-B (ages 11-17)  $r = .78$ ; WISC

Concurrent Validity

S-B (ages 3-10)  $r = .86$

S-B (ages 11-17)  $r = .78$

WISC  $r = .82$

Reliability

Spearman-Brown Formula

Deaf (ages 3-10)  $r = .947$

Deaf (ages 11-17)  $r = .918$

Hearing (ages 3-10)  $r = .933$

Hearing (ages 11-17)  $r = .904$

Evidence of concurrent validity was possible with the hearing population. Correlations are listed between the Hiskey-Nebraska Test of Learning Aptitude ratings and ratings on the Stanford Binet (Form L M) or the WISC. The magnitude of these correlations indicate the scale can be used with confidence as a measure of intelligence

**Reliability and Validity (specific)** — Standardized on hearing impaired and hearing children (separate norms)  
Normative sample: 1099 hearing impaired children and 1074 hearing children.

**Publisher's Comments** — Ages three through 18 years.

**Strengths** — Pantomimed and verbal directions.

**Other Assessment Techniques Necessary** — Keep materials not in use completely out of sight.

**Name of Instrument** — Raven's Colored Progressive Matrices (H.L. Lewis and Co., Ltd.), 1948.

**Available Through** — Psychological Corporation

**Description** — Sixty abstract designs with part from each removed: missing part is chosen from 6-8 alternatives, items arranged in order of increasing difficulty.

**Reliability and Validity (general)** — Manual gives the information on reliability and validity.

Reliability (Burke, 1958):

Test-retest coefficients for normal late adolescents and adults range from .79 to .93.

Split half and Kuder Richardson Formula 20 coefficients vary within same limits as above.

Reliability coefficients for non-English-speaking students are of about same magnitude as those reported for English-speaking students.

Validity:

Matrices and Stanford-Binet .41 to .86

Matrices and Wechsler Scales .60 to .70

Matrices and Verbal Group Tests .27 and .67, most in .40s

Matrices and Performance Group Tests .22 and .80, most in .30 and .58

**Strengths** — Nonverbal test. Eliminate verbal instructions by pantomime. Simple oral instructions. Good as second test, to substitute another more comprehensive IQ test. Easy to administer and score. Useful for identifying subjects who have good ability but who have poorly developed verbal skills.

**Weaknesses** — Yields invalid test scores of impulsive hearing impaired children who tend to respond randomly rather than with accuracy and care. No adequate American norms.

**Name of Instrument** — The Chicago Nonverbal Examination

**Available Through** — The Psychological Corporation

**Description** — A nonverbal group intelligence test consisting of nine subtests preceded by simple directions and practice exercises. (Pantomime directions for the hearing impaired).

**Reliability and Validity (general)** — Reliability for pantomime directions by correlating odd and even items, .92 for ages seven and eight, .91 for ages nine to 12, .93 for ages 12, 13 and 14. Validity for pantomime directions the validity between CA and total score of group ages eight to 14 = .57.

**Reliability and Validity (specific)** — Hearing Impaired. Norms for the pantomime directions include those for the hearing impaired separate from the verbal directions.

**Publisher's Comments** — For ages eight through 14 for children handicapped in the use of the English language.

**Strengths** — Both verbal and pantomime directions are presented in great detail.

**Adaptions** — For test #6 a cut up picture of the practice exercise (i.e., boy throwing ball) to use with the hearing impaired.

**Name of Instrument** — Revised Beta Examination

**Available Through** — The Psychological Corporation

**Description** — A nonverbal group test consisting of six subtests each of which is preceded by simple directions and practice exercises.

**Reliability and Validity (general)** — Coefficient of correlation of .92 between Beta IQs and Wechsler IQs. Reliability coefficient .90 intercorrelations among the subtests.

**Publisher's Comments** — A measure of general intellectual ability of persons who are relatively illiterate or who are non-English speaking, ages 16 and above.

**Strengths** — Simple, precise directions.

**Adaptions** — Directions could be put on the board or on an overhead projector when working with the hearing impaired.

### Developmental Assessment

While the need for detailed developmental information appears to be universally agreed upon, the following tests/checklists are suggested as being readily adaptable for hearing impaired population.

1. Denver Developmental Screening Test - ages: zero through six
2. McCarthy Scales of Children's Abilities - ages. two one one half through eight and one half available through Psychological Corporation
3. Vineland Social Maturity Scale - ages zero through 18 available through American Guidance Service
4. The following tests are also suggested as resources.
  - a. *Assessment of Early Child Development*, Dorothy Flatan and Peter Neubauner
  - b. *Assessment in Infancy*, Uzgiris and J. Magarar Hunt
  - c. *Developmental Diagnosis*, Gesell and Amatruda

**Name of Instrument** — Denver Developmental Screening Test

**Available Through** — LADOCA, Project and Publishing Foundation, Inc.

**Description** — This test consists of 105 easily administered and scoreable items used in assessing development in the areas of Gross Motor, Language, Fine Motor and Personal-Social development.

**Reliability and Validity (general)** — There is a high degree of agreement between the DDST rating and quotient of the Stanford-Binet and Bayley Scale of Infant Tests (revised) resulting in 7.2 percent over-referrals and 2.95 percent underreferrals.

**Reliability and Validity (specific)** — Test ratio reliability on 20 children ranging in age from two months to five and one-half years was 95.8 percent for all items grouped. Examiner reliability was 80 to 95 percent with an average of 90 percent.

**Publisher's Comments** — To screen children for possible developmental problems and to monitor high risk children. To be used with children from birth to six years of age.

**Strengths** — Quick screening tool.

### Receptive Language Vocabulary

**Name of Instrument** — Peabody Picture Vocabulary Test (Dunn, 1965)

**Available Through** — American Guidance Service

**Description** — Individual wide range picture vocabulary test. Subject is presented with page containing four pictures and is given stimulus word. Subject responds with picture best describing the given word. Scores reported in MA, percentiles, IQ.

**Reliability and Validity (general)** — Reliability. .67 at six years to .84 at 17 and 18 years. Validity: item validity and accumulated statistical validity are reported.

**Reliability and Validity** (specific) — Not standardized on hearing impaired. Standardized on regular classroom, institutionalized retarded, educable retardation, physically handicapped.

**Publisher's Comments** — Designed to provide an estimate of a subject's verbal intelligence through measuring his or her hearing vocabulary, ages two through 18.

**Strengths** — Words can be presented visually, use nonverbal responses.

**Adaptions** — Not used as IQ test, have words printed on cards, present one at a time; use for vocabulary age

**Other Assessment Techniques Necessary** — Combine auditory and visual presentation or adapt using written word.

**Name of Instrument** — Illinois Test of Psycholinguistic Abilities

**Available Through** — University of Illinois Press

**Description** — Receptive process (decoding): visual reception, organizing process (association): visual motor; expressive (encoding): verbal and manual expression.

**Publisher's Comments** — Systematic, diagnostic device which taps and differentiates various facets of cognitive ability, ages two through 10 years.

**Strengths** — Nonverbal responses, nonverbal presentation, demonstration provided for test items

**Name of Instrument** — Assessment of Children's Language Comprehension 1973 Revision

**Available Through** — Consulting Psychologists Press, Inc.

**Description** — Assessment of comprehension with the use of pictures.

**Reliability and Validity** (general) — Reliability .80 - .86, normative data not yet completed.

**Publisher's Comments** — Designed to enable a clinician to determine how many word classes in different combinations of length and complexity a child would be able to understand, ages three through six

**Strengths** — Requires no oral response.

**Weaknesses** — Depends on oral presentation.

**Adaptions** — Written presentation of instructions. Can be used with older children but norms must be interpreted in view of the range of the test.

**Name of Instrument** — Detroit Tests of Learning Aptitudes

**Available Through** — Bobbs-Merrill Company, Inc.

**Description** — Consists of 19 subtests. A minimum of nine are usually administered. Subtests appropriate for the hearing impaired are Pictorial Absurdities, Pictorial Opposites, Motor Speed and Precision, Visual Attention Span for Objects, Free Association, Memory for Designs, Visual Attention in Span for Letters, Disarranged pictures. The verbal absurdities subtest is recommended for assessing receptive language, semantic-verbal.

**Reliability and Validity** (general) — Detroit, MI. Test-retest reliability was .959 after an interval of five months (N=48); .675 after two to three years for 792 pupils ranging in age from seven to 12 years. For 16 subtests correlations were from .2 to .4. Highest correlation was .679 between verbal absurdities and verbal opposites.

**Publisher's Comments** — Assesses eight areas of intellectual functioning. The test yields a general mental age as well as a series of subtest mental ages. A flexible test adapted to examining preschool to high school students.

**Strengths** — Pantomime directions for hearing impaired.

**Name of Instrument** — Test for Auditory Comprehension of Language

**Available Through** — Learning Concepts

**Description** — Assesses auditory comprehension of language structure. Can assign a child to a developmental level of comprehension. Look at areas of linguistic difficulty. Consists of 101 plates of line drawings.

**Reliability and Validity (general)** — High test retest reliability. .94 for English, .93 for Spanish. Validity scores increased with increasing language development, test distinguishes individuals with disorders and those not.

**Reliability and Validity (specific)** — English and Spanish (normal hearing) and retarded.

**Publisher's Comments** — Evaluating auditory comprehension of language and language disorders, ages three through seven.

**Strengths** — Does not require a verbal response.

**Weaknesses** — Oral presentation.

**Adaptions** — Can be used with older hearing impaired children. Caution in interpreting norms with older hearing impaired since test supplies norms up to age of six through 11. Adapt directions to written, auditory, auditory and speechreading or manual.

**Name of Instrument** — Northwestern Syntax Screening Test (NSST) by Laura L. Lee (1971)

**Available Through** — Northwestern University Press, Evanston, Ill.

**Description** — Screening device to give quick estimate of syntactic development. Measuring both the receptive and expressive use of syntactic forms, it isolates those children between three and eight years and who are sufficiently delayed in syntactic development to warrant further study. Test time is approximately 15 minutes.

**Weaknesses** — Some of the pictures are poor.

**Adaptions** — Written directions.

**Name of Instrument** — Goldman-Fristoe Test of Articulation

**Available Through** — American Guidance Service, Inc.

**Description** — Screening test designed to provide a systematic means of assessing an individual's articulation of consonant sounds in words.

**Strengths** — Can be administered rapidly, clear items.

**Weaknesses** — Vocabulary may not be known by young hearing impaired children.

**Adaptions** — It is recommended that the written form of each item be presented to the child during testing. Measures should include both imitative and spontaneous verbal productions.

### Expressive Language

Due to a paucity of appropriate standardized measures to assess speech intelligibility, it is recommended that evaluation procedures utilize tape recorded samples of student's speech, as judged by selected trained listeners. Stimuli could include the verbal production of single words, phrases, sentences, conversational speech, using vocabulary which is familiar to the child being tested. Measurements of related aspects such as voice quality, duration, rate of speaking, intonation and stress patterns could be ascertained from this same taped sample.

It is recommended that such measurements be made in the fall and spring of each school year in an attempt to document any improvement or regression in the child's performance. Scores in each area could be represented by percentage figures, and each child's performance could be charted to display longitudinal developmental information.

**Name of Instrument** — Carrow Elicited Language Inventory

**Available Through** — Learning Concepts

**Description** — Consists of 52 stimuli including 51 sentences and one phrase, range in length from two to 10 words. Children are tested individually. Stimulus sentences are presented in a live voice and child's responses are recorded.

**Reliability and Validity** (general) — Concurrent validity:  $-0.62$ , congruent validity:  $0.77$  with clinical judgement and  $-0.79$  with DSS. Test-retest reliability:  $0.98$ ; interexaminer reliability  $0.98$ .

**Reliability and Validity** (specific) — Standardized on 475 white children (three through zero to seven through 11) from middle socioeconomic homes where standard American English was spoken, from Houston, Texas

**Publisher's Comments** — To provide a means of measuring a child's productive control of grammar; provides a means of identifying children with language problems.

### Assessment of Achievement

As in the case with most test instruments, there is little normative information that has been gathered for the hearing impaired population in achievement tests.

The Metropolitan Achievement Test offers normative data for the hearing handicapped, but only in the subtests of reading and vocabulary. The Stanford Achievement Test is most universally used in programs for the hearing impaired, and also in areas of higher education for the hearing handicapped. *There is a second version of the Stanford test that is available with modified administration and altered scaling procedures that may be used to compare the hearing impaired with other hearing impaired.*

It is recommended that all achievement test batteries be administered annually to the hearing impaired student at his or her reading level. Experience has shown that when analyzing test scores, those obtained in the subtests of reading comprehension and math applications are most indicative of overall academic performance

**Name of Instrument** — Peabody Individual Achievement Test

**Available Through** — American Guidance Service, Inc.

**Description** — Consists of five subtests, designed to survey the subject's level in basic skills. Individual receives the test stimuli through auditory and visual modes.

**Reliability and Validity** (general) — Reliability coefficients vary from a  $.42$  for kindergarten subjects in spelling to  $.94$  for third graders in reading, with an overall median of  $.78$ . Concurrent validity with PPVT IQ scores vary by level, from a median of  $.42$  at kindergarten to a median of  $.69$  at grade three.

**Publisher's Comments** — To provide a wide-range screening measure of achievement in the areas of mathematics, reading, spelling and general information.

**Strengths** — Four of the five subtests do not require verbal responses, auditory and visual presentation.

**Name of Instrument** — Key Math Diagnostic Arithmetic Test (1971)

**Available Through** — American Guidance Service

**Description** — Individually administered test designed to provide a diagnostic assessment of skill in mathematics. Test items are divided into 14 subtests organized into three major areas, content, operations and associations.

**Reliability and Validity** (general) — Total Median Reliability (split half) =  $.96$ , Validity =  $.59$  Test-retest;  $.69$  with Iowa Test of Basic Skills.

**Publisher's Comments** — Norming = 1,222 Ss, Grades K-7

**Strengths** — Visual Presentation of problems.

**Adaptions** — Written directions.

### Visual Functioning

**Name of Instrument** — Draw A Man (Goodenough Harris) Extension and Revision of Goodenough Drawing Test (1926) prepared by Harris (1963).

**Available Through** — Harcourt, Brace, Jovanovich, Inc.

**Description** — May be used as screening test, a rapid and nonthreatening means of gaining impressions of child's general ability level and as a means of estimating mental ability of children for whom verbal tests of ability are inappropriate.

**Reliability and Validity (general)** — Interscorer .90, Retest .94 for one-day interval, .65 for three year interval; most retests .60s and 70s.

Validity: with Stanford-Binet .43 to .74, with WISC .43.

**Reliability and Validity (specific)** — Used with children five through 15 years of age. Not normed on hearing impaired.

**Strengths** — Not time consuming; use where nonverbal tests of ability are inappropriate.

**Weaknesses** — Directions are difficult to give young children. Standardized manner. Scoring is less objective than desired, so this is relatively unreliable.

**Adaptions** — Not to be used as projective.

**Name of Instrument** — Motor-Free Visual Perception Test (Colarusso and Hammill, 1972)

**Available Through** — Academic Therapy Publications

**Description** — Test of visual perception which avoids motor involvement and which is practical for screening, diagnostic and research purposes. Five categories. spatial relationships, visual discrimination, figure-ground, visual closure, visual memory.

**Reliability and Validity (general)** — Reliability = .81 (test retest), .88 (split half), .86 (Kuder Richardson) Validity = .49 (vis. percep.), .31 (IQ), .58 (school perf.)

**Adaptions** — Can key type of response expected through pantomime.

**Name of Instrument** — Developmental Test of Visual Motor Integration (Beery, 1967)

**Available Through** — Follett Publishing Co.

**Description** — Series of 24 geometric forms to be copied with paper and pencil, test of visual motor integration. As measured by geometric form reproduction. Scores reported as visual motor integration. Age equivalent.

**Reliability and Validity (general)** — Reliability = .98; Validity = .89 (boys) .88 (girls)

**Publisher's Comments** — Ages three to 14.

**Strengths** — Minimal verbal instructions.

**Adaptions** — Can key type of response through pantomime.

**Name of Instrument** — Bender Gestalt Test for Young Children (Developmental Bender Scoring System for Young Children - Elizabeth Kippitz, 1963)

**Available Through** — Grune and Stratton, Inc.

**Description** — Consists of nine figures which are presented one at a time and subject is to reproduce on blank piece of paper. Used as visual motor tests to measure process of maturation of visual motor perception in young children. Test yields Bender age to compare to CA.

**Reliability and Validity (general)** — Scorer Reliability .88 to .96 (Miller, Lowenfeld, Linder and Turner, 1962) Test Score reliability - no validity reported in text.

**Reliability and Validity (specific)** — Scoring system age range five to zero to 10 11 (no hearing impaired in sample)

**Publisher's Comments** — Five years to 10 years, 11 months.

**Strengths** — Nonverbal presentation. Can key type of response through pantomime.

**Other Assessment Techniques Helpful** — Koppitz Scoring System five to zero to 10-11. Hatt Scoring System - 11+

## Assessment of Auditory Functioning

In the assessment of auditory functioning, suggested are several methods that range from informal inventories to parts of existing instruments. Caution is advised in administration of such measures to insure that the discrimination problems presented by the peripheral hearing loss do not invalidate obtained results.

1. Informal Assessment - repetition of words, sentences, etc.
2. Wepman Auditory Discrimination Test
3. Goldman-Fristoe Woodcock Auditory Skills Test Battery
  - a. Diagnostic Auditory Discrimination Test (part I, II, III) (three to 80 years)
  - b. Auditory Memory Subtest; Recognition Memory (three to 80 years)
  - c. Sound-Symbol Tests Subtest; Sound Mimicry (three to 80 years)
  - d. Sound-Symbol Tests Subtest; Sound Blending (three to 80 years)
4. ITPA -
  - a. Auditory Closure (two to 10 years)
  - b. Sound Blending (two to four, three to seven years)
  - c. Auditory Sequential Memory (two to 10 years)

## Speechreading

Although no widely accepted assessment tool which evaluates speechreading skills has been developed, speechreading is nonetheless an integral part of the evaluation of receptive language functioning. Some formal speechreading tests have been developed and are available, but these tests generally contain vocabulary which may be unfamiliar to the student and, therefore, their use as an assessment tool is not suggested.

It is suggested that programs for the hearing impaired develop criterion reference tests for speechreading skills and that these records be updated annually to measure growth in this area.

## Psychomotor

**Name of Instrument** - The Purdue Perceptual-Motor Survey (Roach and Kephart, 1966)

**Available Through** - Charles Merrill, Inc.

**Description** - Instrument developed to assess qualitatively the perceptual motor abilities of children in early grades. Designed primarily to detect errors in perceptual-motor development.

**Reliability and Validity (general)** - Reliability (test-retest) = .946, Validity (Pearson-Concurrent) = .654.

**Reliability and Validity (specific)** - Not normed on hearing impaired, no recognized hearing impaired population.

**Strengths** - Desired responses can be pantomimed by examiner.

# Appendix C

## Selected Assessment Instruments for Reading

Classroom teachers can administer, score and interpret most of the tests provided that the manual of directions is closely followed. A counselor or psychologist can help overcome minor hurdles and assist in test interpretation.

Some tests require highly technical skills in measurement and appraisal. These are labeled restricted and should be used by professionals who have adequate professional training in the administration and interpretation of psychological tests.

### **Clymer-Barrett Prereading Battery**

Authors: Clymer and Barrett

Publisher: Personnel Press (1968)

Range: Kindergarten and Grade One

Use: This test contains two auditory discrimination subtests: Discrimination of Beginning Sounds in Words and Discrimination of Ending Sounds in Words. In the Beginning Sounds subtest the children see a series of four pictures, two of which begin with the same sound (ball, horn, comb, boy). After the examiner labels each picture, the children are to indicate which one of the second, third or fourth pictures has the same beginning sound as the first picture.

### **Doren Diagnostic Reading Test of Word Recognition Skills**

Author: Doren

Publisher: American Guidance Service, 1956

Range: Grades one through four

Use: The Rhyming subtest (Test A) measures the child's ability to recognize two words that rhyme. For example, the examiner reads the words ground and drowned. If the child recognizes these two words as rhyming, he or she writes an R in the booklet, if the child thinks the two words do not rhyme, he or she indicates this with an N in the booklet.

### **Durrell Listening-Reading Series**

Authors: Durrell, Hayes and Brassard

Publisher: Harcourt, Brace and World (1969)

Range: Primary (grades one to three, five), Intermediate (grades 3.5 to six) and Advanced (grades seven to nine)

Use: The Durrell Listening-Reading Series is designed to provide a comparison of children's reading and listening abilities. It proposes to identify children with reading disabilities and to measure the degree of retardation in reading as compared to listening. Vocabulary and comprehension of sentences are assessed twice, first on the listening test and again on the reading test. On the listening tests the children listen and respond, while on the reading test the children read and respond.

### **Durrell Analysis of Reading Difficulty**

Author: Durrell

Publisher: World Book Company (1955)

Range: Grades one through six (individually administered)

Use: The Listening Comprehension subtest measures the ability to listen carefully while the examiner reads a short story and to recall the significant details of the story. For example, the examiner reads the following story: "A boy had a big gray cat. He was going to give her some milk. She did not come when he called. He saw her up in a tree looking down at a big dog. The boy sent the dog away. Then the cat jumped down from the tree and came for her milk." The examiner then asks the child to answer seven or more questions about the story.

**Durrell-Sullivan Reading Capacity and Achievement Tests**  
(Primary and Intermediate)

Authors: Durrell and Sullivan

Publisher: Harcourt, Brace and World (1937)

Range: Primary Test: Grades 2.5-4.5; Intermediate Test: Grades three to six

Use: Both the Primary and Intermediate Tests contain a Paragraph Meaning subtest. This is principally a test of auditory comprehension. A child listens while the examiner reads a story. Then the child is asked to answer five questions about the passage. He or she responds by selecting the one picture which best answers the question. The questions are phrased in words other than those used in the paragraph.

**Gates-MacGinitie Reading Tests: Readiness Skills Test**

Authors: Gates and MacGinitie

Publisher: Teachers College Press (1968)

Range: End of Kindergarten or Beginning of Grade One

Use: This test contains three relevant subtests. The Auditory Discrimination subtest measures the ability to distinguish between two words with similar sounds. The children are shown a picture of a peach and a beach. After the examiner names both pictures, he again pronounces the name of one of the pictures and the children mark the corresponding picture.

The Listening Comprehension subtest measures the ability to understand the thought of a story. For example, after the examiner reads a story aloud to the children, he asks a question about the story. The children then mark the one picture that best answers the question.

The Auditory Blending subtest measures the ability to join the parts of a word (which are presented orally) into a whole word. For example, the test booklet contains three pictures: a dress, a horse and a girl drinking. The children are to select the correct picture after hearing the examiner say dr-e-ss.

**Gates-McKillop Reading Diagnostic Tests**

Authors: Gates and McKillop

Publishers: Teachers College Press (1962)

Range: Grades one through six (individually administered)

Use: The Auditory Blending subtest measures the ability to join parts of a word into the whole word. For example, the child hears b-ox and is to say the whole word correctly.

The Auditory Discrimination subtest measures the ability to recognize if two words are the same (e.g., cheer-cheer) or different (e.g., mountain-fountain).

**Harrison-Stroud Reading Readiness Profiles**

Authors: Harrison and Stroud

Publisher: Houghton-Mifflin Company (1956)

Range: Kindergarten through grade one

Use: The Making Auditory Discriminations subtest measures the ability to discriminate between spoken words which do or do not begin with identical initial-consonant sounds. For example, the test booklet contains pictures of a finger, button and feather. After the examiner labels each picture, he or she instructs the children to draw a line under the finger. Then the children are instructed to draw a line from the finger to the other thing in the box whose name begins like finger.

### Metropolitan Readiness Tests

Authors: Hildreth, Griffiths and McGauvran

Publisher: Harcourt, Brace and World (1964)

Range: Grades kindergarten through grade one

Use: The Listening subtest measures the child's ability to select from three pictures the one which portrays a situation or event that the teacher describes. For example, the test booklet contains pictures of a cat, a cow and a horse. The children are instructed to mark the animal which supplies milk. Therefore, this test involves both listening and visual comprehension.

### Murphy-Durrell Diagnostic Reading Readiness Test

Authors: Murphy and Durrell

Publisher: Harcourt, Brace and World (1964)

Range: Grade one

Use: The Phonemes subtest measures the ability to identify separate sounds in spoken words. The subtest measures the most frequent consonant sounds in their initial position and a few sounds in the final position. In administering this subtest, the phonemes are first taught, and then tested. For example, the examiner pronounces the words tell, time and take and asks the children to identify the first sound common to them (t). The children then repeat the three words. The examiner directs their attention to the test booklet which contains pictures of a book, table, tent, and cake. After labeling the pictures, the examiner instructs the children to select the ones which begin with the t sound. (This test is very similar to the Murphy-Durrell Reading Readiness Analysis.)

### Reading Aptitude Tests

Author: Monroe

Publisher: Houghton-Mifflin Company (1963)

Range: Beginning of grade one

Use: This test contains three auditory subtests. Auditory Test I measures the ability to discriminate between correct and incorrect pronunciations of words. For example, the children are shown a picture of a hammer. They are to indicate which of the following three sentences applies to this picture: 1) This is a hammer; 2) This is a hanner; 3) This is a habber.

Auditory Test II measures the ability to discriminate sounds accurately and to blend the sounds in word-building activities. For example, the children see a picture of a house, a horse and a mouse, and they are instructed to draw a line around the picture of the "h-ous."

Auditory Test III measures auditory memory. The examiner reads a sixty-seven word passage to an individual child, after which the child retells as much of the story as he can remember. Scoring standards are based upon the ability to retain significant ideas contained in the passage.

### Stanford Diagnostic Reading Test

Authors: Karlsen, Madden and Gardner

Publisher: Harcourt, Brace and World (1966)

Range: Level 1: grade two to the middle of grade four

Use: The Auditory Discrimination subtest measures the ability to detect similarities and differences among the sounds within the words. The examiner reads two words which contain the same sound in the beginning (ice-iron), middle (meat-leaf) or end (sit hat) of both words. The students indicate if the same sound occurred at the beginning, middle or end of the words.

The following references also have auditory discrimination tests which may be of value. However, most have inadequately standardized and enjoy limited acceptance, therefore, caution should accompany their use.

Ayer, G. W. An auditory discrimination test based on Spanish. *Modern Language Journal*, 1960, 44, 227-230.

Farquhar, M. S. Prognostic values of imitative and auditory discrimination tests. *Journal of Speech and Hearing Disorders*, 1961, 26, 342-347.

Gates, A. I. *The Improvement of Reading*. New York: Macmillan, 1935 and 1947.

Hansen, B. F. The application of sound discrimination tests to functional articulatory defectives with normal hearing. *Journal of Speech Disorders*, 1944, 9, 347-355.

Lichtenberg, F. S. A comparison of children's ability to make speech sound discriminations. *The Volta Review*, 1966, 68, 426-434.

Murphy, H. A. Group test for auditory discrimination (unpublished). Boston University, 1941.

Pronovost, W. and Dumbleton, C.A. A picture type speech sound discrimination test (more current title. The Boston University speech sound discrimination picture test). *Journal of Speech and Hearing Disorders*, 1953, 18, 258-266.

Schiefelbush, R. L. and Lindsey, M. J. New test of sound discrimination. *Journal of Speech and Hearing Disorders*, 1958, 23, 153-159.

Templin, M. A study of sound discrimination ability of elementary school pupils. *Journal of Speech Disorders*, 1943, 8, 127-132.

Wheeler, L. R. and Wheeler, V. A study of the relationship of auditory discrimination to silent reading abilities. *Journal of Educational Research*, 1954, 48, 103-113.

#### Test Publishers

American Guidance Service  
Publishers Building  
Circle Pines, Minn. 55014

Bobbs Merrill Co., Inc.  
4300 West 62nd St.  
Indianapolis, Ind. 46206

California Test Bureau  
Del Monte Research Park  
Monterey, Calif. 93940

Cooperative Test Division  
Educational Testing Service  
Princeton, N. J. 08540

Educational Testing Service.  
990 Grove St.  
Evanston, Ill. 60201

The Psychological Corporation  
304 East 45th St.  
New York, N. Y. 10017

Science Research Associates, Inc.  
259 East Erie St.  
Chicago, Ill. 60611

Essay Press  
Box 5, Planetarium Station  
New York, N. Y. 10024

Harcourt, Brace & World, Inc.  
757 Third Ave.  
New York, N. Y. 10017

Houghton Mifflin Company  
53 West 38th St.  
New York, N. Y. 10018

Language Research Associates  
300 North State  
Chicago, Ill. 60610

Personnel Press, Inc.  
20 Nassau St.  
Princeton, N. J. 08540

Teachers College Press  
525 West 120th St.  
New York, N. Y. 10027

University of Illinois Press  
Urbana, Ill. 61801

## References

- Bangs, Tina. *Language and Learning Disorders of the Preacademic Child*. New York: Appleton-Century-Crofts, 1968.
- Buchanan, C. *Readiness in Language Arts*. Palo Alto, California: Behavioral Research Laboratories, 1967
- Buros, O. *The Mental Measurements Yearbooks*. Highland Park, New Jersey: Gryphon Press, 1938, 1941, 1949, 1953, 1959, 1965.
- Buros, O. *Tests In Print*. Highland Park, New Jersey: Gryphon Press, 1961.
- Buros, O. *Reading Tests and Reviews*. Highland Park, New Jersey: Gryphon Press, 1968.
- DiCarlo, L. M., Kendall, D. C. and Goldstein, R. Diagnostic procedures for auditory disorders in children. *Folia Phoniatrica*, 1962, 14, 206-216.
- Engelmann, S. Relationship between psychological theories and the art of teaching. *J. Sch. Psychol.*, 1967, 5 (2), 93-100.
- Flower, Richard M. Auditory disorders and reading disorders. In Richard Flower (et al.), *Reading Disorders: A Multidisciplinary Symposium*. Philadelphia: F. S. Davis, 1965.
- Frostig, Marianne. *The Developmental Program in Visual Perception*. Chicago: Follett, 1966.
- Ilg, Frances and Ames, Louise B. *School Readiness*. New York: Harper and Row, 1965.
- Johnston, D. and Myklebust, H. *Learning Disabilities*. New York: Grune and Stratton, 1967.
- Kephart, N. *The Slow Learner in the Classroom*. Columbus: Charles Merrill, 1960.
- Manolakes, I., Wolfman, R., Scian, M., and Waldo, L. *Try*. New York: Nobel and Nobel, 1967.
- Nichols, R. G. and Stevens, L. A. *Are You Listening?* New York: McGraw-Hill, 1957.
- Reichstein, R. and Rosenstein, J. Differential diagnosis of auditory deficits—a review of the literature *Exceptional Children.*, 1964, 31 (2), 73-82.
- Scott, R., Ratekin, N. and Kramer, K. *The Learning Readiness System: Classification and Seriation Kit* New York: Harper and Row, 1968.
- Sutphin, F. *A Perceptual, Testing-Training Handbook for First Grade Teachers*. Winter Haven, Florida: Lions Research Foundation, 1964.
- Valett, R. *Programming Learning Disabilities*. Palo Alto, California: Fearon Publishers, 1969.

## Additional References

- Bush, W. J. and Giles, M. T. *Aids to Psycholinguistic Teaching*. Columbus, Ohio: Charles Merrill, 1969
- Chall, J. *Learning To Read: The Great Debate*. New York: McGraw-Hill, 1967.
- Hardy, W. G. *Problems of Audition, Perception and Understanding*. Washington, D C: Volta Bureau Report No. 680, 1956.
- Kidd, A. H. and Kidd, R. M. The development of auditory perception in children. In A. H. Kidd and J. L. Rivoire (Eds.), *Perceptual Development in Children*. New York: International Universities Press, 1966.
- Myklebust, H. R. *Auditory Disorders in Children. A Manual for Differential Diagnosis*. New York: Grune and Stratton, 1954.
- Rosner, Jerome, *The Design of an Individualized Perceptual Skills Curriculum*. Pittsburgh, Pennsylvania: University of Pittsburgh, Learning Research and Development Center, 1969.
- Rosher, Jerome, Richman, V., and Scott, R. H. *The Identification of Children with Perceptual-Motor Dysfunction*. Pittsburgh. University of Pittsburgh, Learning Research and Development Center, 1969
- Stevens, S. S. and Davis, H. *Hearing: Its Psychology and Physiology*. New York: Wiley and Sons, 1938

# Appendix D

## Hearing Aid Check Forms

76

73

## Annual Audiologist Assessment of Hearing Aid Functioning

1. HF - Reference Test Gain \_\_\_\_\_  
(1kHz 1.6kHz 2.5kHz)

2. Peak Gain — Frequency \_\_\_\_\_ dB (SPL) \_\_\_\_\_

3. Frequency response at discrete frequencies (60dB input) (1/3 octave band analysis).

Compare to manufacturer's specifications. Specifications input for frequency response curve and SSPL90

4. Equivalent Noise — Output minus reference test gain equals equivalent noise. (use 0dB input.)

5. Establish use curve if one doesn't exist (70dB input).

If use curve is already on file run new use curve and compare.

"Use Curve" — Frequency response curve obtained at "use" VC setting and Tone, PC, and AGC adjustments in "use" setting.

Check for cut outs and internal feedback. Check integrity of earmold, tubing and sound hook, cord and receiver.

Note: Be sure to use correct tubing on test box and manufacturer's specified battery voltage when comparing to manufacturer's specifications.

### Daily Teacher Check of Hearing Aid Functioning

(When problems are observed complete this form and direct to Audiologist as request for assessment.)\*

Name of LEA \_\_\_\_\_ Name of School \_\_\_\_\_

Name of Referring Teacher \_\_\_\_\_

Hearing Aid(s), Brand and Model \_\_\_\_\_

Checklist (check all appropriate items)

Hearing Aid

\_\_\_\_\_ Missing (reported lost, or otherwise unavailable)

Remarks \_\_\_\_\_

Cracks or breaks / Parts missing

\_\_\_\_\_ case cord \_\_\_\_\_ cord

\_\_\_\_\_ receiver \_\_\_\_\_ earmold

\_\_\_\_\_ tubing connector \_\_\_\_\_ battery

\_\_\_\_\_ earmold tubing \_\_\_\_\_ nob(s)

\_\_\_\_\_ switch(es)

Remarks \_\_\_\_\_

\*Inform psychologist and other evaluators that psychological/educational evaluation should be postponed until HA is functioning.

Teacher date referred _____
Interim handling: (Specify title and date referred to next level)
_____
_____
Audiologist date received _____

**PROGRAM FOR EXCEPTIONAL CHILDREN  
IMPAIRED HEARING PROGRAM  
AUDIOMETRIC EVALUATION**

DATE \_\_\_\_\_ SCHOOL \_\_\_\_\_

NAME \_\_\_\_\_ AGE \_\_\_\_\_ TESTED BY: \_\_\_\_\_

ADDRESS \_\_\_\_\_ TEST NO.: \_\_\_\_\_ AUDIOMETER \_\_\_\_\_

RELIABILITY: GOOD \_\_\_\_\_ FAIR \_\_\_\_\_ POOR \_\_\_\_\_

**PURE TONE AUDIOGRAM**

FREQUENCY IN HERTZ

125 250 500 1000 2000 3000 4000 6000 8000

THRESHOLD HEARING LEVEL (in decibels)  
(RE ISO 1964 Standard)

0									
10									
20									
30									
40									
50									
60									
70									
80									
90									
100									
110									

	Unmasked		Masked	
	Rt.	Lt.	Rt.	Lt.
Air Cond.	○	×	△	□
Bone Cond.	>	<	⊏	⊐
	Red—Right		Blue—Left	

↓ — No Response

Average Loss (A/C)  
500-2000

	3 freq.	2 freq.
Rt.		
Lt.		

Additional Tests

**SPEECH AUDIOMETRY TESTS**

Test	Lve	Recorded	
	Voice	Disc	Tape
SRT			
PB			

Test	R	L	BIN	SF
Sp Reception Threshold (SRT)	dB	db	db	db
Sp Discrim Scores (PB)	Quiet	%	%	%
	Noise	%	%	%

Sensation Level for PB's \_\_\_\_\_  
Noise level 10 db less than speech level unless otherwise indicated.

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

79  
Signature \_\_\_\_\_

**Appendix E**  
**Instructional Materials for the**  
**Hearing Impaired and**  
**Bibliography**

Visualanguage Series (Media Services and Captioned Films)

Picture Flash Words (Milton Bradley)

Language Experiences in Early Childhood (Encyclopedia Britannica - \$19.00)

Krug Language (moves toward Fitzgerald Key) unpublished paper

• Introducing English (Lancaster, Houghton, Mifflin - \$7.50)

Language Through Play (Arno Press - \$5.45)

Language Background for Central Institute for the Deaf

Thinking, Reading and Doing (Whitman)

Beginning Pictures and Patterns (Follett)

My Everything Book (Educational Performance)

Easy Bee Book (Artcraft)

Preschool, See and Say (Whitman)

Take a Giant Step to Learning (Jenn Publications)

Experimental Development Program, Enrichment Books for Children (Benefic Press)

Language Arts Transparencies (Captioned Films)

A Dictionary of Idioms for the Deaf

In-other Words (Scott Foresman)

The Harcourt Brace School Dictionary

The Rainbow Dictionary (World Book)

Picture World Puzzle (Whitman)

Language Experiences in Early Childhood (Roach Van Allen and Claryce Allen)

Tell Again Story Cards (McGraw Hill)

Language Development for the Deaf Child. Design for Growth (Board of Education, City of New York)

Outline of Language for Deaf Children (Books I and II) Buell (Volta Bureau)

See It, Say It, Use It (St. Joseph's)

Speech Development for the Deaf Child: Design for Growth (N.Y.)

Phonetic Quizzo (Milton Bradley)

Yale's Formation and Development of Elementary English Sounds (A. G. Bell)

Cued Speech Teacher's Manual (Gallaudet College Book Store, by Cornett)

• Phonovisual Charts (McQueen Publishers)

The Teaching of Speech by Sibley Haycock (A. G. Bell)

Better Speech and Better Reading by Schoolfield (A. G. Bell)

• Speech and Language Series, Alcorn and Yale symbols by Sisters of St. Francis of Assisi (A. G. Bell)

### Signing and Fingerspelling

ABC of Signs

Talk to the Deaf

Talk with your Hands by Watson (George Banta Co.)

Say it with Hands by Fant (Gallaudet College Book Store)

Signing Exact English (Modern Signs Press)

A Basic Course in Manual Communication (NAD)

Rochester Method (articles in *American Annals* and *Volta Review*)

### **Textbooks and Resource Materials for Teaching Language**

*Straight Language for the Deaf* (Fitzgerald)

*Natural Language for the Deaf* (Groht)

*Language Stories and Drills* (Croker, Jones and Pratt)

"The Family Circus", Language Thinking Skills (Educational Media Corp.)

Popper Words (Garrard Publishers)

Dolch Words

*Basic Spelling* (McGraw-Hill)

EFI Cards

*Stories and Games for Easy Lipreading Practice* (A. G. Bell, \$4.35)

*A Lipreader Must Practice* (A. G. Bell, \$2.60)

*A Lipreading Practice Manual for Teenagers and Adults* (A. G. Bell, \$2.60)

*Improve Your Lipreading* (A. G. Bell, \$2.95)

*Speech reading through Sports* (A. G. Bell)

*Hearing with Our Eyes* (manuals and workbooks, A. G. Bell)

*Speechreading* (A Guide for Laymen) (A. G. Bell, \$1.50)

*Integrated Lessons in Lipreading and Auditory Training* (A. G. Bell)

### **Auditory Training**

Peabody Primary Kit

Rhythm Band Instruments and Records

Teacher Made Language Experience Cards

Play It By Ear (John Tracy Clinic)

Guberina Method (Some articles appeared in *Volta*)

*Phonics Workbook* (Modern Curriculum Press)

*Auditory Discrimination in Depth* (Teaching Resources Corporation, \$50.00)

Look and Listen Games (The Gelles Widmer Co.)

Sights and Sounds

*Auditory Training for the Deaf Child: Design for Growth* (Board of Education, City of New York)

### **Speech**

Audio flashcard reader program (EFI)

Phonic Mirror

Northampton Charst (A. G. Bell)

Scott Foresman Reading System Series

Open Court Reading Program

SRA Program (Science Research Associates)

Sullivan Reading Series (workbooks and teacher guide)

Sounds We Hear Series (Scott Foresman)

Specific Skills Series (Barnell Loft)

Enchanted Gates, Words of Wonder, McMillian

Cavalcades, 6th grade (Scott Foresman)

Discovery Through Reading (Ginn and Co.)

Opening Books, A Magic Box, Things You See (McMillian)

The Talking Alphabet (Scott Foresman)

Read and Say Verb Game (E. V. Dolch)

Linguistic Block Series (Scott Foresman)

Teaching Reading to Deaf Children. (B. Hart, A. G. Bell)

Just Beginning to Read Books. (Three Little Pigs, Three Goats) (Hillert-Follett)

Learning to Read and Write With Comprehension (Quality Print, Inc., Orlando, Florida)

#### **Textbooks and Resources for Teaching Communications Skills Lipreading.**

Treasure Chest of Games for Lipreading Teachers (A. G. Bell, \$1.50)

What's Its Name? (John Tracy or A. G. Bell, manual and record)

Teaching Communication Skills to the Preschool Hearing Impaired Child (A. G. Bell)

Pictures from Golden Books, Instruction sets, Magazines

Language Through Play (Arno Press, \$5.45)

Language Master Cards

Book and Pamphlet Lists from Alexander Graham Bell Association for the Deaf, Inc., 3417 Volta Place, N.W., Washington, D.C. 20007

J. B. Lippincott Company, Educational Publishing Division, East Washington Square, Philadelphia, Pennsylvania 19105. (Reading for Meaning)

Taylor Publishing Company, Educational Division, Box 597, Dallas, Texas 75221, (Your World books and study-prints for social studies)

R. B. Walter, Inc., 2718 Piedmont Road, N.E., Atlanta, Georgia 30305 (Includes Hayes ditto materials in all areas)

Education Division, Western Publishing Company, Inc., 850 Third Avenue, New York, N.Y. 10022 (Supplementary books)

Cuisenaire Company of America, Inc., 12 Church St., New Rochelle, N. Y. 10805 (rods and other related materials)

Scholastic Book Services, 904 Sylvan Ave., Englewood Cliffs, N.J. 07632 (Supplementary books on all levels)

#### **Textbooks and Resource Materials for Teaching Writing**

Better Handwriting (Noble and Wolfe)

*Imaginary Line Handwriting* (Steck-Vaughn)

*I Learn to Write* (Revised) (Bobbs Merrill)

Frostig Developmental Program in Visual Perception

*We Learn and Write* (Palmer Method)

*Learning to Print and Write* (Mead)

*Look and Write* - ~~EBE~~ (McGraw Hill)

### **Textbooks and Resource Materials for Teaching Reading**

#### **Scholastic Book Series**

Golden Shape Book - \$.39

Golden Books - \$.39

*Open Highways*

*Readers' Digest*

Peabody Rebus Reading Series - American Guidance Service

Peabody Language Kits

### **Textbooks and Teaching Resources for English Grammar**

#### **Robert's English Series**

*Readers' Digest*

### **Textbooks and Resources for Teaching Science**

Science Through Discovery (formerly handled by Singer - Randon House)

Things Around You (Steck, worktext)

Today's Basic Science (Mavana and Zaffaroni)

Discovering Science (Merrell)

Weekly Reader

Biological Science. Patterns and Processes, Biological Sciences Curriculum Study (Holt, Rhinehart and Winston)

Work a Text in Earth Science (Cambridge Book Company, Inc.)

Work a Text in Life Science (Same as above)

Book Sections for Scholastic Book Services

### **Catalogues you may wish to write for**

Gallaudet College Booklist of Deafness, Gallaudet Bookstore, Kendall Green, Washington, D.C. 20002

Nifty Instructional Materials, 3300 Pinson Valley Parkway, Birmingham, Alabama 35217

Modern Curriculum Press, Division of Reardon, Baer and Company, Cleveland, Ohio 44136

Developmental Learning Materials, 7440 North Natchez Avenue, Niles, Illinois 60648

Instruction Learning Materials, The Instructo Corporation, Paoli, Pennsylvania 19301

American Guidance Service, Inc., Publisher's Building, Circle Pines, Minnesota 55014 (Peabody)

The Continental Press, Inc., 127 Cain Street, Atlanta, Georgia 30303

Barnell Loft, LTD, 958 Church Street, Baldwin, N.Y. 11510 (Specific Skill Series)

Experimental Developmental Program, Benefic Press, 10300 W. Roosevelt Rd., Westchester, Ill. 60153 (Social Studies Program)

### Textbooks and Resource Materials for Teaching Math

Developmental Learning Materials Growth and Change Cards

*Modern School Mathematics* (Houghton Mifflin)

*Elementary Math* (Nichols)

*Arithmetic Helps* (CID)

*Modern Math Through Discovery* (Silver Burdett)

*Seeing Through Arithmetic* (Scott Foresman)

*Happy Way to Numbers* (Holt, Rhinehart and Winston)

Open Court Kindergarten program

Sets and Numbers I (Singer)

New Math Readiness (Instructo)

Peabody kit shapes

Number Concept Cards (Milton Bradley)

Cuisenaire Rods

### Textbooks and Resource Materials for Teaching Social Studies

Communities and their needs (Silver Burdette)

The Family (Milton Bradley)

*Weekly Readers*

Community Helpers Teaching Pictures (Instructo)

Your School and Home and Your School and Your Neighborhood (Ginn)

Our World (Taylor)

Benefic Press Social Studies Program including levels A, B and C of Teacher's Big Book, enrichment readers and pupil workbooks

For free materials on Georgia, write to Mr. David Prothress at the Capitol.

### Adolescence

Burke, Douglas. "Parental Roles in Job Placement of Deaf Adolescents." *The Volta Review*, Vol. 69, No. 4 (April 1967), pp. 253-256, 281.

Goldin, George J. and others. "Some Attitudes of Deaf High School Students Toward Attendance at College with Normally Hearing Students." *The Volta Review*, Vol. 71, No. 7 (October 1969), pp. 408-414.

Kopp, Harnet Green. "Adolescence—Adjustment or Rebellion." *The Volta Review*, Vol. 68, No. 4 (April 1966), pp. 266-267.

Mathas, Crysoula and Morehouse, William. "A Work Study Program for Hearing Impaired Students." *The Volta Review*, Vol. 71, No. 9 (December 1969), pp. 553-556.

Miller, Anne Small. "The 'Growing Up' Program at Clarke School." *The Volta Review*, Vol. 71, No. 8 (November 1969), pp. 472-483.

Reineke, Mary E. "Junior High—A Cooperative Venture." *The Volta Review*, Vol. 68, No. 4 (April 1966), pp. 284-288.

Rodda, M. "Social Adjustment of Hearing Impaired Adolescents." *The Volta Review*, Vol. 68, No. 4 (April 1966), pp. 279-283, 318.

"The Model High School for the Deaf." *The Volta Review*, Vol. 69, No. 4 (April 1967), pp. 279-281.

Spector, Samuel I. "The Problem Adolescent." *The Volta Review*, Vol. 70, No. 5 (May 1968), pp. 320-329.

### Audiology

Dale, D. M. C. *Applied Audiology for Children*, 2nd ed. Springfield, Ill., Charles C. Thomas, 1967.

Declan, Sister Mary. "Audiological Findings in Testing Aphasic Children." *The Volta Review*, Vol. 71, No. 7 (October 1969), pp. 433-434.

Griffiths, Giwa. *Conquering Childhood Deafness*. A. G. Bell Assoc., 1967.

Hodgson, William R. "Auditory Characteristics of Post Rubella Impairment." *The Volta Review*, Vol. 71, No. 2 (February 1969), pp. 97-103.

Lowell, Marilyn O. and Lowell, Edgar L. "Evoked Response Audiometry." *The Volta Review*, Vol. 75, No. 2 (February 1973), pp. 109-113.

McConnell, Freeman, PhD. and Ward, Paul H., PhD. *Deafness in Childhood*. Nashville, Vanderbilt University Press, 1967.

Nober, E. Harris, PhD., Ed. *Trends in the Audiologic Assessment and Rehabilitation of Children*. Syracuse, Syracuse University Press, 1966.

Northern, Jerry L. "Deafness in the Future." *The Volta Review*, Vol. 71, No. 4 (April 1969), pp. 238-240.

Ventry, Ira M., Chalklin, Joseph B. and Dixon, Richard E. *Hearing Measurement, A Book of Readings*. New York, Appleton-Century-Crofts, 1971. Address: Appleton-Century-Crofts, Educational Division, Meredith Corporation, 440 Park Avenue South, New York, N.Y. 10016.

### Auditory Training

Berg, Frederick S. "Communication Training for Hearing Impaired Adults." *The Volta Review*, Vol. 68, No. 5 (May 1966), pp. 345-347, 384.

Fellendorf, George W. "The Verbotonal Method. Questions and Answers." (Interview with Peter Guberina) *The Volta Review*, Vol. 71, No. 4 (April 1969), pp. 213-224.

Jeffers, Janet. "Formats and the Auditory Training of Deaf Children." *The Volta Review*, Vol. 68, No. 6 (June 1966), pp. 418-423, 449.

Herzog, Virginia. "Auditory Stimuli in the Kitchen." *The Volta Review*, Vol. 74, No. 6 (September 1972), pp. 3526-352C

Lowell, Edgar L. and Stoner, Marguerite. *Play It By Ear*. John Tracy Clinic, 1960 (Wolfer Publishing Co)

McDermott, Elisabeth F. "Auditory Training. Learning the Joy of Listening." *The Volta Review*, Vol. 73, No. 3 (March 1971), pp. 182-185.

Prescott, Robin. "Acoustic Puzzles. Auditory Training Games." *The Volta Review*, Vol. 73, No. 1 (January 1971), pp. 51-53.

Rollins, Joan C. "I Heard That - Auditory Training at Home." *The Volta Review*, Vol. 74, No. 7 (October 1972), pp. 426-431.

Wadenburg, Enk. "Experience from 30 years, Auditory Training." *The Volta Review*, Vol. 69, No. 9 (November 1967), pp. 588-594.

Whitehurst, Mary Wood. "Two Pioneers in Auditory Training." *The Volta Review*, Vol. 72, No. 3 (March 1970), pp. 185-188.

## Curriculum and Methods

Behrens, Thomas R. and Meisegöier, Richard W. "Social Studies in the Education of Deaf Children." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 410-414.

Blish, Isabel Steele "The Social Studies. A Challenge." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 415-418.

Bowman, Elizabeth. "Our Neighborhood." *The Volta Review*, Vol. 71, No. 8 (November 1969), pp. 508-509.

Calvert, Donald R., Cenotti, Mary Ann, and Geile, Suzann. "A Program for Apasic Children." *The Volta Review*, Vol. 68, No. 2 (February 1966), pp. 144-149, 177.

Gellens, Suzanne. "Behavior Modification: A Classroom Technique." *The Volta Review*, Vol. 75, No. 2 (February 1973), pp. 114-125.

Gray, Virginia Q. "Curriculum for Older Low Achieving Hearing Impaired Students." *The Volta Review*, Vol. 68, No. 9 (November 1966), pp. 634-638.

Haaby, Lawrence O. "Changing Social Studies Programs—Trends." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 399-404.

Harrington, John D. and Silver, Rawley A. "Art Education and the Education of Deaf Students." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 475-480.

Kline, Lorraine F. "A Social Hygiene Program in a Residential School for Deaf Children." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 509-512.

Leman, George. "Creative Dramatics for the Deaf and Hard of Hearing Pupils." *The Volta Review*, Vol. 69, No. 9 (November 1967), pp. 610-613.

Lennan, Robert K. "A Pilot Project for Emotionally Disturbed Deaf Boys." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 513-516.

Miller, June. "Curriculum Development, 1967." Proceedings of International Conference on Oral Education of the Deaf, Vol. II, A. G. Bell Association for the Deaf, 1967, pp. 1168-1677.

Nelson, Wilma I. "Basic Research Needs in the Adaption of Public Elementary Curriculums for the Deaf." Proceedings of the International Conference on Oral Education of the Deaf, Vol. II, A. G. Bell Association for the Deaf, 1967, pp. 1965-1981.

Northcott, Winifred Nies. "Head Start Program: Implications for Deaf Children." *The Volta Review*, Vol. 70, No. 2 (February 1968), pp. 107-118.

Owsley, Peter J. "Development of a Sense of Place and Space in Deaf Children." Proceedings of the International Conference on Oral Education of the Deaf, Vol. II, A. G. Bell Association for the Deaf, 1967, pp. 1817-1833.

Rosenstein, Joseph. "Curriculum and Cognition." *The Volta Review*, Vol. 73, No. 8 (November 1971), pp. 481-496.

Simmons, Audrey Ann. "Content Subjects Through Language." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 481-486.

Streng, Alice H. "The Language Arts in the Curriculum for Deaf Children." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 487-492.

Woodward, Helen M. E. "The Social Studies in a School for Deaf Children." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 405-409.

Wolfram, Bonnie R. "Health Education. Evolution of Revolution?" *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 500-507.

## Early Childhood

Bereiter, C. and Engelmann, S. *Teaching Disadvantaged Children in the Preschool*. New Jersey, Prentice Hall, 1966.

- Craig, William N. "Effect of Preschool Training on Development of Reading and Lipreading Skills of Deaf Children." *American Annals of the Deaf*, Vol. 109, No. 3 (March 1964), pp. 280-296.
- Ewing, Lady E. C. "Some Psychological Variables in the Training of Young Deaf Children." Reprint No. 785, A. G. Bell Association, Washington.
- Fraiberg, Selma H. *The Magic Years*. Charles Scribner's Sons, 1959.
- Gesell, Arnold. "The Psychological Development of Normal and Deaf Children in Their Preschool Years." Report No. 674, A. G. Bell Association, Washington.
- Gesell, Arnold, M. D. and Amatruda, Catherine S., M.D. *Developmental Diagnosis*, 2nd ed. Harper and Row. (Hoebe Medical Division, 1947).
- Holt, John. *How Children Learn*. Pitman Publishing Corp., New York, 1969.
- Johnson, June. *Home Play for the Preschool Child*. Harper and Row, New York, 1957.
- McGee, Donald I. "Early Education of the Hearing Impaired." *The Need for a Rationale, Education of the Hearing Impaired Bulletin* (Winter 1969), pp. 15-18.
- Mira, Mary. "Behavior Modification Applied to Training Young Deaf Children." *Exceptional Children*, Vol. 39, No. 3 (November 1972), pp. 225-229.
- Reed, Michael M. "Education of Young Hearing Impaired Children." *Proceedings of ICOED*, Vol. II (1967), pp. 1874-1890.
- Schlesinger, Hilde S. "A Child First." *The Volta Review*, Vol. 71, No. 9 (December 1969), pp. 545-551.
- Schwartzberg, Joanne G. "A Young Deaf Child Learns Emotional Concepts from Stick Figures and Faces." *The Volta Review*, Vol. 71, No. 4 (April 1969), pp. 228-232.
- Sample, Jean E. *Hearing Impaired Preschool Child*. A. G. Bell Assoc., Washington, 1970.
- Winn, Marie and Procher, Mary Ann. *The Playgroup Book*. MacMillan Co., New York, 1967.
- Wisconsin Department of Public Instruction. *A Guide to Early Education of the Hearing Impaired*. Bulletin No. 2057, Madison, Wisconsin, 1972.

### Infant

- Conference on Newborn Hearing Screening Proceedings Summary and Recommendations. Airport, Hilton Inn, California, February 23, 24, 25, 1971.
- Conner, Leo E. "Early Intervention." *The Volta Review*, Vol. 73, No. 5 (May 1971), pp. 270-271.
- Downs, Marion P. "Identification and Training of the Deaf Child—Birth to One Year." *The Volta Review*, Vol. 70, No. 3 (March 1968), pp. 154-158.
- Harns, Grace and Weber, Larry. "Babies with Hearing Losses." *The Volta Review*, Vol. 69, No. 9 (November 1967), pp. 604-609.
- Hellmuth, Jerome, ed. *Exceptional Infant*, Vol. I *The Normal Infant*, Brunner/Mezel, Inc., 80 East 11th Street, New York, N.Y. 10003, 1967.
- Horton, Kathryn B. "Home Demonstration for Parents of Very Young Deaf Children." *The Volta Review*, Vol. 70, No. 2 (February 1968), pp. 97-101, 104.
- Knox, Laura L. and McConnell, Freeman. "Helping Parents to Help Deaf Infants." *Children*, Vol. 15, No. 5 (September-October, 1968), pp. 183-187.
- McConnell, Freeman. "A New Approach to the Management of Childhood Deafness." *Pediatric Clinics of North America*, Vol. 17, No. 2 (May 1970), pp. 347-362.
- McConnell, Freeman, ed. *Proceedings on the Conference on Current Practices in the Management of Deaf Infants (Zero to Three Years)*. Vanderbilt University, 1968.

McCroskey, Robert L. "Early Education of Infants with Severe Auditory Impairments." *Proceedings of ICOED*, Vol. II, 1967, pp. 1891-1905.

Pollack, Doreen. *Educational Audiology for the Limited Hearing Infant*. Charles C. Thomas, Springfield, Ill., 1970.

Simmons, Audrey Ann. "Home Demonstration Teaching for Parents and Infants at Central Institute for the Deaf." *Proceedings of ICOED*, Vol. II, 1967, pp. 1863-1873.

### Integration

Auble, Lee F. "Normalization Can Be A Reality." *The Volta Review*, Vol. 74, No. 8 (November 1972), pp. 481-486.

Bitter, Grant B. and Mears, Edwin G. "Facilitating the Integration of Hearing Impaired Children Into Regular Public School Classes." *The Volta Review*, Vol. 75, No. 1 (January 1973), pp. 13-22.

Bell, Mrs. Walter A. "A Tape Recorder 'Takes Notes' in a Junior High Science Class." *The Volta Review*, Vol. 70, No. 5 (May 1968), pp. 348-349.

Conner, Leo E. "Integration." *The Volta Review*, Vol. 74, No. 4 (April 1972), pp. 207-210.

Frnk, Elizabeth. "Adjusting to Integration. Some Difficulties Hearing Impaired Children Have in Public Schools" *The Volta Review*, Vol. 75, No. 1 (January 1973), pp. 36-46.

Garrett, Constance and Stovall, Ester M. "A Parent's View on Integration." *The Volta Review*, Vol. 74, No. 6 (September 1972), pp. 338-344.

"Helps for Successful Mainstreaming." *A Guide for the Early Education of the Hearing Impaired*. Wisconsin Department of Public Instruction, pp. 22-36.

Johnson, Alice L. "Supportive Instruction for Hearing Impaired Students." *The Volta Review*, Vol. 70, No. 3 (March 1968), pp. 184-188.

Kennedy, Mildred and Whitehurst, Mary Wood. "Suggestions for Friends and Relatives of the Hard of Hearing" *The Volta Review*, Vol. 71, No. 2 (February 1969), pp. 81-88.

Leckie, Doris J. "Creating a Receptive Climate in the Mainstreaming Program." *The Volta Review*, Vol. 75, No. 1 (January 1973), pp. 23-27.

Lewis, Dorothy Noto. "Lipreading Skills of Hearing Impaired Children in Regular Schools." *The Volta Review*, Vol. 74, No. 5 (May 1972), pp. 301-311.

Meacham, Steven R. and Van Dyke, Robert C. "Pushing Back the Walls Between Hearing and Hearing Impaired Children." *The Volta Review*, Vol. 73, No. 6 (September 1971), pp. 359-364.

News Item. "Youthful Volunteers Undertake Tutoring of Handicapped Students." *The Volta Review*, Vol. 72, No. 9, pp. 550-551.

Northcott, Winifred Nies. "Public School Programs for Preschool Hearing Impaired Children and Their Families in Minnesota." *Education of the Hearing Impaired Bulletin*, Winter 1969, pp. 22-23.

Northcott, Winifred Nies. "Reading List on Integration" *The Volta Review*, Vol. 75, No. 1 (January 1973), pp. 33-35.

Northcott, Winifred Nies. "A Hearing Impaired Pupil in the Classroom." *The Volta Review*, Vol. 74, No. 2 (February 1972), pp. 105-108.

Northcott, Winifred Nies. "Tutoring a Hearing Impaired Student in the Elementary Grades." *The Volta Review*, Vol. 74, No. 7 (October 1972), pp. 432-435.

Oremcand, Harriet. "Factors Related to the Education of the Typical Hard of Hearing and Capable Deaf Children in Regular Class Settings." *Speech Convention of the Alexander Graham Bell Association*, Chicago, Ill., 1972.

Owsley, Peter J. "Can a Residential School Program Students into Public Schools?" *The Volta Review*, Vol. 75, No. 1 (January 1973), pp. 28-31.

Reichstein, Jerome. "Integration of Deaf Children at the Preschool Level." *Proceedings of ICOED*, Vol. II, 1967, pp. 2038-2051.

Salem, James M. "Partial Integration at the High School Level." *The Volta Review*, Vol. 73, No. 1 (January 1971), pp. 42-46.

Scheeline, Alice. "Integrating Deaf Children into Public School." *The Volta Review*, Vol. 73, No. 6 (September 1971), pp. 370-373.

Stinson, Michael. "Group Communication for the Deaf." *The Volta Review*, Vol. 74, No. 1 (January 1972), pp. 52-54.

## Language

Alterman, Arthur I. "Language and the Education of Children with Early Profound Deafness." *American Annals of the Deaf*, September 1970, pp. 514-521.

Bar Adon, Aaron and Leopold, Werner F. (eds.) *Child Language, A Book of Readings*. Prentice-Hall, Englewood Cliffs, New Jersey, 1971.

Barnes, Sister Jeanne d'Arc. "The Developmental of Connected Language Skills." *The Volta Review*, Vol. 60, No. 2 (February 1958), pp. 58-65.

Bell, Dorothy. "Communication Problems in Preschool Children." *The Volta Review*, Vol. 70, No. 4 (April 1968), pp. 241-245.

Bell, Janice W. "Visual Language." *The Volta Review*, Vol. 73, No. 3 (March 1971), pp. 157-160.

Bellugi and R. Brown. *The Acquisition of Language*. New York. Monograph Society for Research in Child Development, 1964.

Bender, Ruth E. "Teaching the Nonverbal Child." *The Volta Review*, Vol. 70, No. 7 (October 1968), pp. 537-548.

"Contributing to the Language and Social Adjustment of the Hearing Impaired Child. Suggestions from Parents." *The Volta Review*, Vol. 74, No. 8 (November 1972), pp. 487-491.

Denner, Patricia. *Language Through Play*. Arno Press, New York, 1969.

Engel, Rose. *Language Motivating Experiences for Young Children*. DFA Publishers, Van Nuys, Calif., 1968.

Fant, Gunnar, ed. *Speech Communication Ability and Profound Deafness*. A. G. Bell Association, Washington, 1972.

Fitzgerald, Edith. *Straight Language for the Deaf*. Volta Bureau, Washington, 1963.

Harris, Norma. "A Physiologic Approach to Motivation of Language." *Proceedings of ICOED*, Vol. II 1967, pp. 1572-1591.

Lehman, Jean Utley, ed. *Selected Readings in Language for Teachers of the Hearing Impaired*. Simon and Schuster, New York, 1970.

Magrier, Marjorie E. "Language Development in the Lower School at the Clarke School for the Deaf." *Proceedings of the ICOED*, U. S. Government Printing Office, 1964, pp. 505-507.

McNeill, David. *The Acquisition of Language*. Harper and Row, Publishers, New York, 1970.

Power, D. J. and Quigley, S. P. "Deaf Children's Acquisition of the Passive Voice." *Journal of Speech and Hearing Research*, Vol. 16, No. 1 (March 1973), pp. 5-11.

Presnell, Lucille McKinney. "Hearing Impaired Children's Comprehension and Production of Syntax in Oral Language." *Journal of Speech and Hearing Research*, Vol. 16, No. 1 (March 1973), pp. 12-21.

Rush, Mary Lou. *The Language of Directions*. A. G. Bell Assoc., Washington, 1970.

Rush, Mary Lou. "Writing for Children with Language and Reading Deficiencies." *The Volta Review*, Vol. 74, No. 8 (November 1972), pp. 492-501.

- Simmons, A. A. "Motivating Language in the Young Child." *Proceedings of ICOED*, Vol. II, 1967, pp. 1592-1617.
- Streng, Alice. *Syntax, Speech and Hearing Applied Linguistics for Teachers of Children with Language and Hearing Disabilities*. Grune and Stratton, New York, 1972.
- Sweeney, Mae E. "Project Letter Writing." *The Volta Review*, Vol. 70, No. 2 (February 1968), pp. 120-121.
- Van Uden, Anthony. *A World of Language for Deaf Children. Part I - Basic Principles*, Second Ed. Rotterdam University Press, The Netherlands, 1970.
- Wallace, Emily. "Polaroid Camera Used in Teaching Language." *The Volta Review*, Vol. 73, No. 6 (September 1971), pp. 353-355.
- Withrow, Frank B. "Acquisition of Language by Deaf Children with Other Disabilities." *The Volta Review*, Vol. 68, No. 1 (January 1966), pp. 106-115.

### Media

- Bolesta, Mrs. Burl. "Multi Media in the Preschool." *The Volta Review*, Vol. 72, No. 3 (March 1970), pp. 175-179.
- Cunningham, Dean. "Testing Modified Transparencies for Teaching the Deaf with Overhead Projectors." *The Volta Review*, Vol. 71, No. 3 (March 1969), pp. 174-181.
- Diedrich, William M. "Use of Video Tape in Teaching Clinical Skills." *The Volta Review*, Vol. 68, No. 9 (November 1966), pp. 644-647.
- Ely, Ronald. "The Affective Dimension of Instructional Technology." *American Annals of the Deaf*, Vol. 117, No. 5 (October 1972), pp. 479-481.
- "Films on Hearing and Deafness." *The Volta Review*, Vol. 69, No. 7 (September 1967), pp. 446-456.
- Hart, Beatrice Ostern and Cory, Patricia Blair. "The Contribution of Library Resources to Academic Curriculum." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 460-463.
- Ladsen, Melvin. "Media and the Affective Domain of Minority Deaf Children." *American Annals of the Deaf*, Vol. 117, No. 5 (October 1972), pp. 482-484.
- Olshin, George M. "The Emergence of a New Special Education Resource. The IMC." *The Volta Review*, Vol. 70, No. 5 (May 1968), pp. 309-313.
- Pfau, Glenn S. "The Application of Programmed Instruction Principles to Classroom Instruction." *The Volta Review*, Vol. 72, No. 6 (September 1970), pp. 340-348.
- Pfau, Glenn S. "Reinforcement and Learning—Some Considerations with Programmed Instructions and the Deaf Child." *The Volta Review*, Vol. 72, No. 7 (October 1970), pp. 408-412.
- Stepp, Robert E. "Educational Media and Deaf Education. The Emerging Literature." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 465-474.
- Withrow, Frank B. "Status of 8mm Motion Pictures in the Classroom." *The Volta Review*, Vol. 68, No. 9 (November 1966), pp. 670-672.

### Music

- Brck, Sister Rose Marie. "Eurhythmics: One Aspect of Audition." *The Volta Review*, Vol. 75, No. 3 (March 1973), pp. 155-160.
- Hogan, Loretta C., Berme, Patricia and Butter, Susan. "A Music Program for Young Deaf Children. A 'Mod' Approach." *The Volta Review*, Vol. 70, No. 7 (October 1968), pp. 561-565.
- Hummel, Cora Jo Moore. "The Value of Music in Teaching Deaf Students." *The Volta Review*, Vol. 73, No. 4 (April 1971), pp. 224-228, 243, 249.
- McDermott, Elisabeth F. "Music and Rhythms—From Movement to Lipreading and Speech." *The Volta Review*, Vol. 73, No. 4 (April 1971), pp. 229-232.
- Stahlem, Evelyn M. "The Feel of Music." *The Volta Review*, Vol. 69, No. 7 (September 1967), pp. 468-569.

## Parent Guidance

- Catalano, Ruth Weiner. "Importance of Relationship with Parents." *Proceedings of ICOED*, Vol. II, 1967, pp. 2068-2070.
- Fellendorf, George W. and Harrow, Icie. "Parent Counseling 1961-1968." *The Volta Review*, Vol. 72, No. 3 (January 1970), pp. 51.
- French, Sophie. "To Parents of Young Deaf Children. Some Suggestions for Child Management." *The Volta Review*, Vol. 70, No. 4 (April 1968), pp. 453-457.
- German, Lois. "Older Deaf Students. Advice to Parents of Young Deaf Children." *The Volta Review*, Vol. 73, No. 8 (November 1971), pp. 497-502.
- Harns, Norma. "A Pilot Study of Parental Attitudes." Reprint No. 739, A. G. Bell Association, Washington.
- Hill, Arlene. "Some Guidelines for Sex Education of the Deaf Child." *The Volta Review*, Vol. 73, No. 2 (February 1971), pp. 120-125.
- Jonsson, Arvid T. "Camping for Deaf Children." *The Volta Review*, Vol. 69, No. 5 (May 1967), pp. 325-327.
- Ling, Agnes H. "Advice for Parents of Young Deaf Children. How To Begin." *The Volta Review*, Vol. 70, No. 5 (May 1968), pp. 316-319.
- McDonald, Eugene T. *Understand Those Feelings. A Guide for Parents of Handicapped Children and Everyone Who Counsels Them*. Pittsburgh. Stanwix House, 3020 Chartiers Avenue, 15204, 1962.
- Patterson, Gerald R. and Gullion, M. Elizabeth. *Living With Children*. Research Press, Champaign, Ill., 1968.
- Stibick, Marguerite. "Pilot Program for Siblings of Acoustically Impaired Children." *The Volta Review*, Vol. 74, No. 6 (September 1972), pp. 352d-352f.
- Tweedie, David. "A Summer Program for Parents of Deaf Children." *The Volta Review*, Vol. 71, No. 4 (April 1969), pp. 225-227.

## Reading

- Balow, Bruce, Peplow, Helen F. and Ella. "Reading Comprehension Skills Among Hearing Impaired Adolescents." *The Volta Review*, Vol. 73, No. 2 (February 1971), pp. 113-119.
- "Books for Teenagers." *The Volta Review*, Vol. 68, No. 4 (April 1966), pp. 299-301.
- Foy, Robert. "Teaching Reading to Hearing Impaired Junior High School Pupils." *The Volta Review*, Vol. 68, No. 4 (April 1966), pp. 315-316.
- Gray, William S. *On Their Own In Reading*. Scott Foresman Co., Chicago, 1960.
- Jenson, Pauline M. "Reading—Profile and Promise." *Proceedings of the ICOED*, Vol. II, A. G. Bell Association, 1967, pp. 1834-1842.
- McDermott, Elisabeth F. "Storytelling—A Relaxed and Natural Path to Lipreading, Language and Reading." *The Volta Review*, Vol. 73, No. 1 (January 1971), pp. 54-57.
- Media Services and Captioned Films. *A Bibliography of Reading for Deaf Children*. BEH, Office of Education, Washington, 1972.
- Newton, Mary Griffin. *Books for Deaf Children. A Graded Annotated Bibliography*. A. G. Bell Association, 1962.
- Restino, Lilhan C. R. "Reading Achievement. Are We Asking the Right Questions?" *Proceedings of the ICOED*, Vol. II, A. G. Bell Association, 1967, pp. 1843-1852.
- Rudloff, Joseph S. "The Hearing Handicapped Retarded Reader." *The Volta Review*, Vol. 68, No. 8 (October 1966), pp. 567-571.
- Russell, David H. Karp, Etta E. *Reading Aids Through the Grades*. Bureau of Publications, Teachers College, Columbia University, New York, 1964.

## Science

- Anselmini, Andrew. "A Science Program in a School for the Deaf." *Proceedings of the ICOED*, Vol. II, A. G. Bell Association, 1967, pp. 1843-1852.
- Bowman, Elizabeth W. "Exploring Nature. An Enrichment Study in the Oral Education of Elementary Deaf Classes." *Proceedings of ICOED*, Vol. II, 1967, pp. 1963-1965.
- DeWatt, Patricia A. "Adaptations of the Scientific Method for the Deaf Child." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 394-398.
- Hayden, Jean S. and Woodward, Helen M. E. "Rationale for a Science Program." *The Volta Review*, Vol. 70, No. 3 (March 1968), pp. 159-165.
- Hodges, H. G. "Natural Science for All Students." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 379-384.
- Litman, Allan. "Science for Deaf Children." *Proceedings of the ICOED*, Vol. II, A. G. Bell Association, 1967, pp. 1735-1757.
- Owsley, Peter J. "Development of the Cognitive Abilities and Language of Deaf Children Through Science." *The Volta Review*, Vol. 70, No. 6 (September 1968), pp. 389-393.

## Speech

- Boone, Daniel R. "Modification of the Voices of Deaf Children." *The Volta Review*, Vol. 68, No. 9 (November 1966), pp. 686-692.
- Byers, Vincent W. "Initial Consonant Intelligibility by Hearing Impaired Children." *Journal of Speech and Hearing Research*, Vol. 16, No. 1 (March 1973), pp. 48-55.
- Conner, Leo E., Ed.D., ed. *Speech for the Deaf Child: Knowledge and Use*. A. G. Bell Association, 1971.
- Harper, Phyllis. "A Visible Speech Aid." *The Volta Review*, Vol. 72, No. 6 (September 1970), pp. 349-352.
- Haycock, Sibley G. "The Teaching of Speech." *The Volta Bureau*, 1962.
- Irvin, Bruce E. and Wilson, Linda S. "The Voiced Unvoiced Distinction in Deaf Speech." *The American Annals of the Deaf*, Vol. 118, No. 1 (February 1973), pp. 43-45.
- Magner, Marjorie E. and others. *Speech Development*. Curriculum Series, 1971, Clarke School for the Deaf, Northampton, Massachusetts, 1971.
- Martello, Arthur and Lesser, Sister Rosemary. "A New Speech Program." *The Volta Review*, Vol. 71, No. 6 (September 1969), pp. 358-360.
- Numbers, Mary E. "A Plea for Better Speech." *The Volta Review*, Vol. 69, No. 9 (November 1967), pp. 576-582.
- Pugh, Bessie. "Clarifying Speech Problems for the Deaf." *The Volta Review*, Vol. 65, No. 1 (January 1963), pp. 15-21.
- Rozanska, Countess E. D. "An Approach to Teaching Speech to the Deaf." *The Volta Review*, Vol. 68, No. 10 (December 1966), pp. 758-761.
- Vivian, Rose M. "The Tadoma Method. A Tactual Approach to Speech and Speechreading." *The Volta Review*, Vol. 68, No. 10 (December 1966), pp. 733-737.
- Vorce, Eleanor. "Speech Curriculum." *Speech for the Deaf Child. Knowledge and Use*, Leo E. Conner, ed., A. G. Bell Assoc. for the Deaf, Washington, D.C., 1971, pp. 221-244.
- Yale, Caroline A. *Formation and Development of Elementary English Sounds*. Clarke School for the Deaf, Northampton, Massachusetts, 1946.

### Speechreading

McDorman, James R. "A Method of Teaching Lipreading Using Programmed Learning Principles." *The Volta Review*, Vol. 69, No. 5 (May 1967), pp. 316-318.

McDermott, Elisabeth F. "Lipreading: One Tool for Understanding." *The Volta Review*, Vol. 73, No. 5 (May 1971), pp. 279-281.

Stepp, Robert E. "A Speechreading Laboratory for Deaf Children." *The Volta Review*, Vol. 68, No. 6 (June 1966), pp. 408-415.

### Vocational

Fellendorf, George W. "Technical Training for Deaf Students at Community College." *The Volta Review*, Vol. 72, No. 5 (May 1970), pp. 296-302.

Greenleaf, Gene. "A Trade and Technical Institute Program for Deaf and Hard of Hearing Students." *The Volta Review*, Vol. 72, No. 6 (September 1970), pp. 357-361.

9

Federal law prohibits discrimination on the basis of race, color or national origin (Title VI of the Civil Rights Act of 1964), sex (Title IX of the Education Amendments of 1972 and Title II of the Vocational Education Amendments of 1976), or handicap (Section 504 of the Rehabilitation Act of 1973) in educational programs or activities receiving federal financial assistance.

Employees, students and the general public are hereby notified that the Georgia Department of Education does not discriminate in any educational programs or activities or in employment policies.

The following individuals have been designated as the employees responsible for coordinating the department's effort to implement this nondiscriminatory policy.

- Title II — Loydia Webber, Vocational Equity Coordinator
- Title VI — Peyton Williams, Jr., Associate Superintendent of State Schools and Special Services
- Title IX — Evelyn Rowe and Myra Tolbert, Coordinators
- Section 504 — Jane Lee, Special Education Coordinator

Inquiries concerning the application of Title II, Title VI, Title IX or Section 504 to the policies and practices of the department may be addressed to the persons listed above at the Georgia Department of Education, State Office Building, Atlanta 30334, to the Regional Office for Civil Rights, Atlanta 30323, or to the Director, Office for Civil Rights, Education Department, Washington, D.C. 20201.