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PROVISIONS FOR THE EDUCATION OF MENTALLY RETARDED DEAF
CHILDREN IN RESIDENTIAL SCHOOLS FOR THE DEAF.

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AN INVESTIGATION OF THE EDUCATION OF MENTALLY RETARDED
DEAF (MRD) CHILDREN IN RESIDENTIAL SCHOOLS FOR THE DEAF, THE
STUDY AIMED TO DESCRIBE POLICIES AND PROCEDURES FOR
ADMISSION, SPECIAL ACADEMIC AND VOCATIONAL PROVISIONS, AND
QUALIFICATIONS OF CLASSROOM TEACHERS. ADDITIONAL PURPOSES
WERE TO ESTIMATE PREVALENCE AND TO ASSESS ADMINISTRATIVE
ATTITUDES TOWARD INSTRUCTIONAL ORGANIZATION. THE INFORMATION
WAS DRAWN FROM ADMINISTRATORS AT 64 OF THE 80 RESIDENTIAL
SCHOOLS FOR THE DEAF IN THE UNITED STATES AND FROM 150
TEACHERS IN 40 SCHOOLS. RESULTS CONCERNING MRD CHILDREN
INDICATED THAT A PRIMARY DISABILITY OF DEAFNESS WAS THE MAJOR
ADMISSION CRITERION. RESULTS ALSO REVEALED DISSATISFACTION
WITH PSYCHOMETRIC INSTRUMENTS, UNCERTAINTY ABOUT THE
OBJECTIVES AND METHODS OF TEACHING, AND CONCERN AND CONFUSION
ABOUT TEACHER TRAINING. NEEDS INDICATED WERE THOSE FOR (1)
DEVELOPMENT OF TEACHING OBJECTIVES, METHODS, AND MATERIALS.
(2) MORE PRECISE NOMENCLATURE AND AN EDUCATIONALLY CONCEIVED
CLASSIFICATION SYSTEM, (3) STUDIES OF INCIDENCE AND
PREVALENCE, (4) STUDIES OF EDUCATIONAL NEEDS, ALTERNATIVES,
AND POTENTIAL, AND (5) AMELIORATION OF NEGATIVE ATTITUDES
AMONG ADMINISTRATORS. THE STUDY CONCLUDED THAT A RELATIVELY
LARGE NUMBER OF MRD CHILDREN ARE ENROLLED IN RESIDENTIAL
SCHOOLS FOR THE DEAF AND THAT WITHOUT EXTENSIVE CHANGES IN
THE PRESENT CHARACTER OF EDUCATION SERVICES MANY OF THOSE
CHILDREN WILL NOT ACHIEVE SOCIAL COMPETENCE. THIRTY-FIVE
TABLES PRESENT THE DATA. THE APPENDIX INCLUDES THE
QUESTIONNAIRES FOR ADMINISTRATORS, TEACHERS, PSYCHOLOGISTS,
AND A REPORT ON "ADMINISTRATORS' OPINIONS OF OPTIMUM
PROVISIONS FOR MENTALLY RETARDED DEAF CHILDREN." (JD)

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PROVISIONS FOR THE EDUCATION
OF MENTALLY RETARDED DEAF STUDENTS
IN RESIDENTIAL SCHOOLS FOR THE DEAF

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**PROVISIONS FOR THE EDUCATION OF MENTALLY RETARDED
DEAF CHILDREN IN RESIDENTIAL SCHOOLS FOR THE DEAF**

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University of Pittsburgh
December, 1965**

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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MENTALLY RETARDED DEAF CHILDREN IN PROGRAMS FOR THE DEAF:

EPIDEMIOLOGY & SPECIAL PROVISIONS

Grant Number 32-48-1110-5008

**The Research Reported Herein was Supported
by a Grant from the U. S. Department of Health,
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FOREWARD

This investigation was prompted by the increasing concern of special educators, and educators of the deaf in particular, for the educational needs of deaf children who are also mentally retarded. Particular attention to the needs of these children is due probably to indications of their increasing prevalence and to general recognition of the educability of most mentally retarded children.

Dr. Anderson, Principal Investigator of this project, and now a member of the faculty of the University of North Carolina, was at the time of the investigation a doctoral candidate in the Program in Special Education and Rehabilitation of the University of Pittsburgh. With a major in the education of the mentally retarded and training in speech and hearing, he was particularly well-prepared to select this topic for his dissertation.

Gratefully acknowledged is the support of the Division of Exceptional Children and Youth of the U. S. Office of Education for expediting this investigation under the "Small Grant" program. The consultation of Dr. Anderson's dissertation committee was also valuable to the investigation.

Appreciation is expressed to Dr. Sam Craig, Father Thomas Bartley, Mrs. Jane Birch, and others who lent early support to the project when instruments were being field

tested.

Particular appreciation is extended to the many superintendents, teachers, and psychologists of the residential schools who participated in the investigation. Information sought of these people required considerable time at a period when the task of conducting an educational program is particularly demanding, during the last month of the school year. It is hoped that the information and conclusions reported herein warrant the generous response of the participants.

This report has been adapted and condensed from Dr. Anderson's dissertation to reflect a more general style of reporting.

Godfrey D. Stevens
E. Ross Stuckless
Co-Project Directors

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I. INTRODUCTION

Historically, efforts to provide educational services for the deaf have reflected attempts to modify the misconception that all deaf people are mentally deficient. This misconception has had deleterious effects on the education of deaf children and adults.

The notion that the deaf were not educable was first seriously questioned during the sixteenth century (Frisina, 1955). In the United States, a distinction between the deaf and the mentally deficient was made concomitantly with the movement to establish educational programs for the deaf. With the establishment of the first permanent school for the deaf in this country in 1817 in Hartford, Connecticut, a clear distinction was made between mental deficiency and deafness.

Since the sixteenth century, the lay public has become cognizant of a number of the misconceptions erroneously attributed to deaf individuals. While it is now generally recognized that a diagnosis of deafness does not imply mental deficiency, it is obvious that a certain percentage of the deaf function at levels of measured intelligence and social adaptation which tend to produce a condition not unlike mental retardation.

There is general evidence to suggest that the pre-

valence of mental retardation among deaf children is increasing. Research into the etiology and treatment of communicable and infectious disease, the establishment of improved public health services, advances in prenatal care and reduction of infant mortality, improved nutrition, increased education, and better housing have contributed to the higher incidence and prevalence of deaf children with multiple disability. Rusk (1958, p. 17), and Doctor (1959a, p. 35) have emphasized that many patients who would have died twenty-five years ago are being saved by modern methods of patient care, but at the price of living out their remaining years under the handicap of one or more major disabling conditions.

Changing social and educational philosophies of the past century which reflect a concern for the handicapped have created more interest in educating handicapped children today, with the result that more deaf children with multiple disabilities are being reported by administrators of schools and classes for the deaf. In addition, Weir (1963) reports that more of these children are currently being identified through the use of improved diagnostic procedures. Finally, the increasing population of the United States is resulting in greater numbers of children in all disability categories, including those with multiple disability.

Administrators, psychologists, and teachers have expressed concern in professional and scientific publications

with respect to the quality of services for deaf children with low intelligence. These children present complex management problems to staff members responsible for educational planning in schools for the deaf. Brutton (1959, p. 38) and Stevens (1962, p. 2) emphasize that the schools have been approaching the educational needs of handicapped children in terms of disability. The educator is often called upon to revise the curriculum of the school to meet the needs of the child with multiple disabilities. However, due to the problems which current diagnostic classification schemes seem to incur, the educator is often uncertain as to how to proceed. Terms such as neurological deficit, aphasia, cerebral dysfunctions, and experiential deprivation tell a classroom teacher little about the ways in which appropriate educational plans can be derived.

Whether the child in whom both deafness and mental retardation are diagnosed should be primarily considered a mentally retarded child and educated as such, or whether deafness should be given priority has been an issue. While the practice has been to assign priority to one or the other of the disabilities, no adequate rationale for the assignment of priority of one disability over another presently exists. There does not appear to be a theoretical basis for establishing the primacy of one disability over another disability.

This investigation was directed at providing useful

preliminary information about the mentally retarded deaf child in the school for the deaf which may help in the delineation of some of the attendant problems and serve as a basis for the development of precise educational modifications and research.

II. THE PROBLEM

Before any meaningful understanding with respect to charting productive directions for educational programming for children who may be handicapped by a combination of hearing loss and intellectual deficit, some notion of the state of affairs must be obtained. The problem under study was to obtain some understanding of "the state of the art" and was fragmented in terms of the following objectives.

A. Objectives

The objectives of this investigation were:

- (a) To describe policies and procedures for admission of mentally retarded deaf children to residential schools for the deaf.
- (b) To describe special academic and vocational provisions for mentally retarded deaf children in residential schools for the deaf.
- (c) To describe the qualifications of classroom teachers of mentally retarded deaf children in residential schools for the deaf.
- (d) To estimate the prevalence of mental retardation among deaf children in residential schools for the deaf.

(e) To report judgments of administrators of residential schools for the deaf relative to the most effective organization for instruction of mentally retarded deaf children.

B. Definitions

Incidence - Incidence refers to the number of cases occurring per unit of population within a defined time interval.

Prevalence - Prevalence refers to the number of cases of a disease existing in a given population at any given time.

Mentally Retarded Deaf (MRD) - For the purpose of this investigation, the mentally retarded deaf are operationally defined as those individuals who attend residential schools for the deaf, as listed by the American Annals of the Deaf, and who fall more than one standard deviation below the mean on any standardized individually administered performance test of intelligence. This definition would place the upper I.Q. limit of mental retardation at about 83 (Heber, 1961). A more detailed rationale for the use of this definition is presented in the Review of the Literature.

C. Review of the Literature

A survey of the literature in 1963 (Glovsky and Rigrodsky), indicated that research pertaining to the education of

auditorially impaired mentally retarded children was practically nonexistent. The research issue of The Volta Review (Connor, 1963) lists only eight publications on the auditory impairment-mental retardation diad. Only four articles in this disability category are summarized in the Review of Educational Research: Education of Exceptional Children (Lane, 1963). Despite the lack of research, the literature in the field of special education has increasingly reflected concern about the problems of educating mentally retarded deaf children.

1. The Concept of Deafness

Educators use a definition of deafness which attempts to differentiate between the deaf and hard of hearing for educational purposes (Doctor, 1964). A number of educational definitions of deafness have appeared in the literature (White House Conference on Child Health and Protection, 1931, p. 277; Conference of Executives of American Schools for the Deaf, 1938, pp. 1-3; Wooden, 1963, p. 344). Streng's Classification of Deafness has been widely used by educators and incorporates the behavioral consequences of deafness (Avery, 1958, p. 342).

A single definition of deafness suitable to all of the professions which provide services for deaf people does not exist. There are at least five definitions of deafness from

as many different professional areas (Doctor, 1964, p. 24).

The audiologist probably expresses his definition in decibels . . . The social worker has a definition that is contingent upon the place of the individual in the community and whether or not he fits in with the hearing people or the deaf people . . .

The definition of the otologist is couched in medical terminology . . . The rehabilitation worker is concerned with whether or not a worker can use the telephone or receive directions orally . . . The psychologist has still another definition fitted more directly to his professional needs.

Connor (1961) indicates that terms used to report the extent of hearing impairments lack unity and lists fourteen such terms.

The Office of Education of the United States Department of Health, Education and Welfare has collected data on the number of exceptional children in the United States for almost one hundred years. However, since an adequate definition of deafness does not exist, no definitions for the categories of the deaf and hard of hearing are used. Consequently, estimates of current prevalence of deafness in the United States vary from ninety thousand to sixteen million individuals (Schein, 1964, p. 28). In a recent conference designed to explore the possibilities of developing uniform statistics on incidence and prevalence of hearing impairment, Schein (1964, p. 32) suggests that it may be more practical to describe deafness than to attempt to de-

fine it, for epidemiological purposes. A description of children now in schools and classes for the hearing impaired may lead to an empirically derived classification system.

Silverman (1964, p. 48) concurs that a suitable classification scheme for severe hearing impairment does not presently exist, and states the need for standard classification.

2. The Concept of Mental Retardation

During the early development and use of intelligence tests, it was thought that the intelligence quotient obtained on such tests would be immutable throughout the life of the individual. Since then, the immutability of the I.Q. has been questioned and considerable evidence suggests that the I.Q. should be regarded as a phenotype, like height or weight, for which the genes set limits of potential development but which is finally developed through encounters with the environment (Hunt, 1961; p. 7; Hebb, 1949).

The utility of the I.Q. concept has also been questioned. Osler (1965) states:

If our main object were to make long range predictions of ultimate intelligence at the time of infancy, the I.Q. is not of much use. If on the other hand we confine ourselves to less remote prediction or to the solution of problems current in the child's life, we can rely on the intelligence test result as a reliable and valid measure of intellectual function.

As with definitions of intelligence, past definitions of mental retardation referred to intellectual capacity, constitutional origin, or incurability. The concept of intellectual capacity was used to refer to some genetically-determined maximum level of potential performance or to mal-developed or malfunctioning cerebral structures which had diminished the capacity for intelligent behavior (Heber, 1961).

Educators of the deaf have been reluctant to use the term "mentally retarded" to designate deaf children with low intelligence. The phrase "slow learning deaf child" appears to have gained some acceptance. In dealing with parents, the term is sometimes used because it is viewed as a kinder term than "mentally retarded," not because it has greater scientific meaning. In a discussion of the term "slow learner," Kirk and Johnson (1951, p. 12) state:

From the point of view of educational organization, the term "slow learner" should be applied to the child who seems to have some difficulty in adjusting to the curriculum of the academic school because of slightly inferior intelligence or learning ability. He will require some modification of school offerings within the regular classroom for his maximum growth and development . . . For educational purposes the "slow learner" does not belong in the special class for the mentally handicapped. He is the child for whom the regular class should so differentiate its instruction as to adjust to the wider concept of the average. Slow learners should remain in the regular classes of the public schools, and teachers should adapt instruction to fit the wide varia-

tion which will include the slow learner, the average, and the superior. The reason for the organization of a special class for the mentally handicapped is that the mentally handicapped child presents too marked a deviation from the broad average. His retardation in school is so significant that he requires a different curriculum from that presented to the "slow learner" of the average child.

In writing about the "slow learning deaf child," Leshin (1961, p. 197) defined such children as "those with average or above average potential intelligence who do not learn well, or forget quickly, and for whom there is no obvious physical or mental reason for academic failure." In presenting an example of a "slow learning deaf child," a child who had obtained a performance I.Q. of 115 on the Wechsler Intelligence Scale for Children, was used.

In a subsequent article (Leshin and Stahlecker, 1962), "the slow learning deaf child" was defined as falling between I.Q.'s 80 and 90, and mental retardation was defined in terms of I.Q. as 90 or below. Warren and Kraus (1963) criticize this definition of mental retardation and point out that, according to surveys of the intelligence of deaf children, about half of all deaf children would be considered mentally retarded if the Leshin-Stahlecker definition were used, and if verbal intelligence tests alone were administered. To use the Leshin and Stahlecker definition of "below 90 I.Q." one would include one-fourth of the total general population of the United States.

Warren and Kraus suggest the utilization of the terminology adopted by the American Association on Mental Deficiency in classifying deaf children. Although the Heber classification (Heber, 1961, p. 3) considers as mentally retarded, those individuals who fall more than one standard deviation below the mean of the standardization sample on a general test of intelligence, Warren and Kraus recommend that the I.Q. criterion for mental retardation be placed at two standard deviations below the mean. This would place the upper I.Q. limit of mental retardation at about 67 to 70.

However, if the upper limit of mental retardation were placed at 67 or 70, children in residential schools for the deaf between I.Q. 67 and 80, or better, who actually function as mentally retarded, would not be included. That many deaf children above 67 I.Q. do, in fact, function in the school setting as mentally retarded, is attested by Leenhouts (1964).

3. The Mentally Retarded Deaf

Based on the foregoing review of the literature, the generalization can be made that no definitions of hearing impairment or low intelligence would be acceptable to all professions or even perhaps to all those within a given profession which provide services for deaf children with

limited intellectual functioning. Moreover, a comprehensive cause-effect definition may not be possible to formulate, and indeed may not be operationally useful.

In the absence of a suitable definition or descriptive term to designate children with hearing impairment and low intelligence, the term Mentally Retarded Deaf (MRD) has been selected for this investigation. The MRD are operationally defined as those individuals who attend schools and classes for the deaf as listed by the American Annals of the Deaf (January, 1964, p. 179), and who fall more than one standard deviation below the mean on a standardized individually administered performance test of intelligence. This definition, placing the upper limit of mental retardation, is based on the official definition of the American Association on Mental Deficiency (Heber, 1961, p. 3).

Mental Retardation refers to subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior.

This definition places complete emphasis on the present level of functioning of the individual and in no way implies incurability. In this concept of mental retardation, the individual must meet the dual criteria of reduced intellectual functioning as measured by an intelligence test, and impaired social adaptation.

Subaverage general intellectual functioning is defined as performance greater than one standard deviation below the mean of the standardization sample on a general test of intelligence. On the Arthur Point Scale of Performance Tests (Form 1), for example, minus one standard deviation to minus two standard deviations would range from I.Q. 83 to 67. On the Wechsler Bellevue Intelligence Scale, the range is from 84 to 70. The range from minus one standard deviation to minus two standard deviations is referred to as Borderline Retardation of Measured Intelligence. This is a purely arbitrary criterion. Therefore, subaverage psychometric scores are inadequate as the sole criterion of mental retardation, since we would find individuals below the cut-off score whose social adaptation is adequate and individuals above the cut-off score whose social adaptation is inadequate. This would be true regardless of what test score is selected as the cut-off point.

Heber defines impairment in adaptive behavior as "the effectiveness of the individual in adapting to the natural and social demands of his environment." Impaired adaptive behavior may be reflected in: reduced maturation, learning, and/or social adjustment. These three aspects of adaptation are of different importance as qualifying conditions of mental retardation for different age groups. Impairment in learning, for example, is usually most manifest

at school age and in the school situation.

The Measured Intelligence Dimension is intended for the classification of the current intellectual functioning of the individual and in no way reflects any inference of potential or absolute level of intelligence. In some instances, a person may meet the criteria of mental retardation at one age and not at another, particularly at the borderline level. This definition recognizes that mental retardation is now viewed as a reversible condition, as opposed to the classical and historical concept of "once mentally retarded, always mentally retarded."

The operational definition of mental retardation used in this study is used for research convenience. Such a definition may be incompatible with requirements of a clinical diagnosis of mental retardation.

4. Incidence and Prevalence

(a) Deaf children in schools and classes

According to data published in the American Annals of the Deaf (January, 1964, p. 179), a total of 30,799 children in 465 schools and classes for the deaf received specialized educational services in the United States during the 1963-1964 school year. These data do not include children with hearing impairment in facilities for the mentally retarded. Data representative of the United States on prev-

alence of hearing impairment in institutions for the mentally retarded are not available. Of the 30,799 pupils listed, 18,311 were listed as attending residential schools for the deaf. The remaining 12,488 children were enrolled in day schools and day classes for the deaf.

Residential schools are classified as public, private, or denominational residential schools. A total of 16,938 pupils were enrolled in seventy public residential schools while 1,373 pupils were enrolled in seventeen denominational and private residential schools. The pupil populations of individual public residential schools ranged in number from 35 pupils to 558 pupils. In denominational and private residential schools, the range in number of pupils was from 23 to 173.

During the 1963-1964 school year, 59.4 per cent of the deaf children in the United States who received specialized services in schools and classes for the deaf were educated in residential schools for the deaf. The remaining 40.6 per cent of deaf children, as reported by the American Annals of the Deaf, were enrolled in 378 day school and day class programs. Residential schools for the deaf provide educational services for the majority of deaf children in the United States.

(b) Mentally Retarded Deaf Children

A number of investigations have shown a high incidence of hearing impairment in populations of the retarded.

Using puretone audiometry, Birch and Matthews (1951), Schlanger (1953), Johnston and Farrell (1954), Foale and Patterson (1954), Schlanger and Gottsleben (1956), Kodman, et al. (1958), and Siegenthaler and Kryzywicki (1959) have called attention to the prevalence of impaired puretone sensitivity in the mentally retarded. The results of these studies have been summarized (Matthews, 1957, p. 540; Kodman, 1963, p. 465) and suggest that incidence of impaired hearing is higher than that found in non-retarded populations. Estimates range from 13 to 49 per cent depending upon the hearing loss criteria used. In public school children, the estimates range from three to ten per cent (Kodman, 1963, p. 466).

Evidence of the magnitude of the prevalence of multiple disability in schools and classes for the deaf is presented by Doctor (1959b, p. 333), who lists the following statistics pertaining to deaf children with multiple disabilities. Doctor reports 537 pupils in the United States as being aphasic and deaf, 108 blind and deaf, 640 cerebral palsied and deaf, 405 brain injured and deaf, 186 orthopedically handicapped and deaf, and 1,274 mentally retarded and deaf. According to these figures, 40 per cent of the deaf with multiple disability in the United States are mentally retarded.

Weir (1963) makes the point that figures compiled by Doctor are by no means a complete census of all the deaf with multiple disabilities and handicaps. However, these figures show that in 1954, the number of children with multiple disabilities was approximately 4.5 per cent of the total number of deaf students, but by 1961 this number had increased to approximately 11 per cent. Leenhouts (1959) cites further evidence from a study conducted by the Bureau of Special Education of the State of California. In this study, 310 children, or 15 per cent of the entire group of deaf children of school age in the state were classified as mentally retarded. In addition, "it was found that there were approximately 700 'multiply' handicapped deaf children in California, and of this number, a large proportion were being denied any kind of public school training."

Frisina (1955) studied the populations of three mid-western residential schools for the deaf. Using an I.Q. criterion of 79 on the Grace Arthur Point Scale of Performance, Form II, Frisina found that 9.2 per cent of the schools' populations were mentally retarded. Children who were aphasic, psychotic, cerebral palsied, or who showed gross motor disturbances were not included in the 9.2 per cent figure. If these children are included, Frisina concludes that "It seems reasonable to hypothesize that approx-

imately 10 to 12 per cent of children in residential schools for the deaf are in need of special help on the basis of mental retardation.

5. Educational Provisions and Services

In discussing the impact of the "multiple handicapped" deaf child on special education, Weir (1963) states:

The second area in need of research concerns new or improved methods and materials to be used in teaching the "multiply-handicapped" deaf. One can find little research to aid the teacher in knowing how to approach these children or in knowing what materials to present to them. How is speech and language taught to a retarded deaf child?

(a) Facilities for MRD children

Conflicting viewpoints have been expressed concerning the facilities in which the MRD might best be housed and educated. It is Cruickshank's opinion (1964) that children with multiple disabilities should be handled by the residential school due to the research potential of such centers. Sellin (1964, p. 261) proposes that "residential schools for the deaf should be expected to provide for the educable, but not the trainable retarded child. The trainable child should be placed in an institution for the mentally retarded."

Leenhouts (1959, p. 61) questions having mentally retarded deaf children enrolled in a regular residential

school for the deaf and suggests a separate facility for mentally retarded deaf children. This facility would be on the campus of a residential school for the deaf but would be a separate unit.

MacPherson (1952) has listed the problems of the education of mentally retarded deaf children and recommends that facilities should be established and staffed by teachers who are trained in both deafness and mental retardation.

Leshin and Stahlecker (1962) have postulated that mental retardation, or limited potential to learn results in a greater "educational handicap" than deafness and that when deaf children are severely mentally retarded, they should be housed and educated in institutions for the mentally retarded. Warren and Kraus (1963), however, disagree with Leshin and Stahlecker and contend that:

Since all teachers, whatever their specialty, are trained in problems of learning, one might better plan to have the communication and language problem given primary consideration; the degree of learning difficulty could be taken into account in training. The problem of trying to develop techniques of communication with deaf children is a highly specialized one. Few, if any, teachers of the mentally retarded have been given instructions in techniques of communication with the deaf. One would assume that all teachers of the deaf have been given instructions in how to help children learn.

This view is consistent with that of Stevens (1962) who developed the concept from a theoretical point of view.

(b) *Qualifications of teachers*

The problem of securing adequately trained teachers to teach mentally retarded deaf children has been well-documented (Leenhouts, 1959, p. 60; Doctor, 1959b, p. 333; Weir, 1963; Sellin, 1964).

Mackie et al. (1960), in a study of the preparation of teachers, found that superior teachers of exceptional children did not place priority on knowledge of teaching methods in specialized areas other than the one in which they were working. For example, superior teachers of the deaf ranked "knowledge of methods of teaching children who are mentally retarded," 68th out of a possible 92. Mackie (1960, p. 57) states that:

It was found that a relatively small number of teachers rated their knowledge of teaching methods in areas other than their own as "good," and even more striking, many teachers reported they had not even had opportunity for systematic observation of children with multiple handicaps. About two-thirds of them said they had had "too little" or "none" of this type of observational experience as a systematic part of their own preparation.

Superior teachers of the mentally retarded (Mackie, 1958) ranked "the ability to teach mentally retarded having multiple handicaps, i.e., cerebral palsy, hearing or vision loss" as 89th out of possible 100. The authors conclude

that there was less interest in the total problem of exceptional children and in the multiply handicapped than might have been expected.

It has been common practice in some residential schools for the deaf, to assign teachers who are deaf to classes for retarded deaf children. However, Leenhouts (1964) emphasizes that being deaf is not, in itself, a qualification and that many deaf teachers do not possess the qualities necessary for teaching deaf children with low intelligence. The same may be said for teachers who have no hearing impairment.

The point has been made (Sister Mary Henriella, 1961) that the education of the deaf has not kept pace with developments in the education of the mentally retarded. Many schools for the deaf provide a "watered down curriculum" for educable retarded deaf children until they can be placed with some other agency. If these same children had the benefit of a differential curriculum, it is likely that many of them would have a greater opportunity to develop skills which would enable them to do unskilled or semi-skilled work and to support themselves in adulthood.

III. PROCEDURES

A. Population

A list of schools and classes for the deaf in the United States, published annually in the American Annals of the Deaf, showed that in January, 1964, there were a total of eighty-seven residential schools. Of this total, Gallaudet College, because of the character of its pupil population, and St. Gabriel's School for the Deaf (Puerto Rico), because it is a territory rather than a state, were not included in this study. The administrators of five schools listed as residential schools asked to be withdrawn from participation in the study inasmuch as they did not consider their schools to be residential schools. Therefore, the population from which information would be solicited for this study consisted of eighty residential schools for the deaf.

The total pupil population of the residential schools in this study was 17,381. Pupil populations of individual schools ranged from 35 to 558 pupils (American Annals of the Deaf, January, 1964).

1. Responding Schools

Inquiry schedules directed to administrators, classroom teachers of MRD children, and in selected cases, psychologists, were mailed to the Chief Administrators of residential schools for the deaf. A total of 64 residential schools representing 43 states responded to the inquiry forms. This response represented 80 per cent of the entire population of residential schools. The responding schools included in their enrollment a total of 14,534 pupils, or 79.4 per cent* of the total number of pupils enrolled in residential schools for the deaf. Included in these figures are five schools (a total pupil population of 627) whose administrators indicated that they did not admit children of below average intelligence. The administrators of these schools chose not to complete the inquiry forms since they felt that they were not confronted with the problems involved in the education of MRD children.

2. Responding Teachers

A total of 150 teachers of MRD children, representing 40 residential schools for the deaf, completed an inquiry form for teachers. Nine residential school administrators stated that special classes for retarded deaf chil-

*This percentage (79.4) is an approximate percentage since enrollment data for all residential schools for the deaf were not yet available for the 1964-1965 school year. School enrollment figures for the 1963-1964 school year were used in computing this percentage.

dren had not been organized in their particular schools. Consequently, there were no teacher responses from these schools.

B. Method of Inquiry

Information on MRD children in residential schools for the deaf was obtained from administrators, teachers, and in one phase of the study, six psychologists serving in these schools.

1. Development of Instruments

Questions raised in published professional literature served as a basis for the development of the schedules. Three inquiry schedules were developed, field tested, and revised. Administrators of two residential schools for the deaf were consulted as to the data to be requested of administrators of residential schools for the deaf. Classroom teachers and the psychologist at a residential school for the deaf were consulted about data to be requested of classroom teachers and psychologists in an inquiry schedule.

2. Procedure for Distribution of Inquiry Schedules

The Inquiry Form for Administrators of residential schools for the deaf (Appendix A) was mailed to the chief administrator of each of the eighty residential schools included in the population of this study. In addition, an abstract of the study and a cover letter, and the necessary

number of copies of the Inquiry Form for Teachers (Appendix B) were also mailed to each Chief Administrator. These forms were mailed approximately seven weeks before the schools dismissed for summer vacation.

By sending all inquiry forms to the Chief Administrator, administrators were given an opportunity to examine the Teacher's Inquiry Form prior to making a decision on participation in the study. If the decision was made to participate in the study, the inquiry schedules were distributed by the administrators to classroom teachers who taught a class or classes for MRD children half time or more.

Teachers were instructed to complete the inquiry forms and return them to their chief administrators in sealed envelopes. This would give teachers an opportunity to respond with the assurance that their comments would be confidential. The Chief Administrator would then return all questionnaires to the investigator at the University of Pittsburgh.

3. Follow-up Procedure

After four weeks, follow-up letters and additional copies of the inquiry forms for administrators and teachers were mailed to those schools which had not yet responded.

In addition, administrators of these schools were asked if their staff would participate in collecting psychometric data on all MRD children in their school, if a stipend were available to them. The administrators of six residential schools indicated an interest in participating in this phase of the study. An inquiry form for psychologists or an appropriate administrative designate, was mailed to each of these schools. Site visits were made to two of these schools by the investigator to aid in the collection of psychometric data. The total pupil population of the six residential schools was 1,632.

Four weeks after the follow-up letters were mailed to the non-respondents, telephone calls were made to administrators who had not yet responded to either the initial letter, or the follow-up letter. A final attempt was made to obtain the cooperation of non-respondents by personal interview at the Convention of the American Instructors of the Deaf held in Flint, Michigan in June, 1965.

Sixteen Chief Administrators of residential schools for the deaf did not respond to the inquiry forms. Of this total, fourteen administrators were contacted through a combination of follow-up letters, telephone calls, and personal interviews.

In addition, two administrators chose not to participate because of reservations about the study, particularly with respect to the definition of mental retardation used in this investigation.

4. Data Collected

Data on MRD children in residential schools for the deaf were obtained on admission policies and procedures, qualifications of classroom teachers, and judgments of the most effective instructional organization. These data were collected from Chief Administrators (Appendix A), from classroom teachers of MRD children (Appendix B), and from six psychologists in schools for the deaf (Appendix C).

C. Method of Reporting Results

In an investigation involving survey procedures, and particularly the use of the mailed questionnaire, considerable care must be taken in the collection of information. In spite of this care, the investigator is confronted with sampling error.

Another source of error rests in the interpretation of individual items in a questionnaire by respondents. Again, in spite of the refinement of items which follows field testing, ambiguous items remain, particularly in the case of complex ~~problems~~ involving complex concepts such as those dealt

with in this investigation. Attention is drawn to the fact that all administrators did not respond to all items. Numbers of respondents are indicated in each table.

An example of the latter source of error is interpretation of "mental retardation." One question asked of administrators is perhaps best dealt with at this point rather than under "Results", in order to permit more accurate interpretation of the content of the following chapters.

Administrators were asked to indicate terms they might use to designate children of low intelligence. Because of the intellectual range subsumed under "low intelligence", many administrators suggested the use of more than one term as may be noted in Table 1.

Table 1. Terms Used to Designate Child of Low Intelligence
(56 Administrators Responding).

Term Used	Administrative Responses
Slow Learner	39
Mentally Retarded	27
Educable Mentally Retarded	10
Trainable Mentally Retarded	6
Mentally Handicapped	2

Additional terms indicated were "low achiever", "special class pupil", and "educable". Of those indicating use

of the term "mentally retarded" qualified or unqualified by "educable" and "trainable", 36 administrators responded to a following item asking whether I.Q. was one of the legitimate criteria for defining mental retardation. Twenty-six responded affirmatively, ten negatively.

It would seem then, that considerable variation exists among administrators not only on use of terms they associate with low intelligence, but their interpretation of the concept itself.

Early attention is drawn to the above information so the reader may interpret the following reported information appropriately.

IV. RESULTS

A. Admission Policies and Procedures

1. Admittance and Referral

An inspection of Table 2 shows the type of regulation or law on which criteria for admittance to residential schools for the deaf are based. The largest number of administrators, 35, reported that their criteria for admittance were based on local institutional policy.

Table 2. Legal Basis for Criteria for Admittance to Residential Schools for the Deaf (57 Administrators Responding).

Basis	Number ¹
Local Policy (Institutional)	35
Mandated state law	19
Permissive state law	13

¹Some administrators indicating more than one.

Administrators were asked who within the latitude of state law generally makes the final decision as to whether or not a child is admitted to their school. Of the 57 administrators responding, 32 indicated that they (the administrators) generally make the final decision alone. In 11 of the 57 schools represented in the responses, the school principal

or his equivalent generally makes the final decision. As noted in Table 3, 24 of the 57 responding schools use a committee in the admission process.

Table 3. Responsibility for Decisions on Admittance to Schools for Deaf (57 Administrators Responding).

Decision Maker	Number ¹
Superintendent of School for Deaf	32
A Committee	24
School Principal (or equivalent)	11
Director of Special Education	2
Consulting Psychologist	2
Staff Psychologist	2
Other Person	1

¹Some administrators indicating more than one.

The administrative action taken when a child is considered ineligible for the residential school program is shown in Table 4. Thirty-nine administrators reported that the family was referred to an appropriate facility for the child's disabilities. Twenty-two administrators reported that children were referred back to the original referring agency.

Table 4. Administrative Procedure when a Child Cannot Meet Eligibility Requirements (57 Administrators Responding)

Procedure	Number
Family is referred to an appropriate facility for the child's disability (ies)	39
Child is referred to the original referring agency	22
Specific referral mentioned	13
School takes no action	3

Five administrators commented as follows: "Child is placed in parent-pupil diagnostic teaching;" "Child is referred to Crippled Children's Services for evaluation;" "Referral is made to the State Division of Special Education;" "Specific recommendations may be made" and "Some parents have no agency to turn to for the special problems of their deaf child."

2. Psychological Assessment

A total of 22 administrators (39 per cent of respondents) reported that an intelligence test is administered routinely to children before admittance to school. Some administrators pointed out that occasionally administration of an intelligence test prior to admittance is contingent upon such factors as the age of the child at entry, the linguistic efficiency of the child, and the cultural background

of the child. Consequently, a number of children are admitted to these schools without having a test of intelligence. Thirty-four administrators indicated that no intelligence tests are administered prior to the admittance of the child to school.

Table 5 provides an analysis of the variety of professional workers who generally administer intelligence tests to deaf children in residential schools for the deaf. Twenty administrators stated that intelligence tests are generally administered by a Staff Psychologist. Seven administrators indicated that a Supervisor of Instruction does the testing, and five administrators reported the utilization of a Consulting Psychologist.

Table 5. Personnel who Administer Standardized Intelligence Tests (32 Administrators Responding)

Question	Staff Psychologist	Consulting Psychologist	Supervision of Instruction	Classroom Teacher
If an intelligence test is administered to prospective students before they are admitted to your school, by whom is the test administered?	20	5	7	0

Administrators were asked to check the tests which were preferred to measures of intelligence on children under seven years of age. Forty administrators checked more than one test. Table 6 shows a tabulation of the tests and the number of administrators who checked each test. The test checked most often by administrators was the Wechsler Intelligence Scale for Children (Non-verbal). Of the 53 administrators who responded to this question, 29 administrators, or 55 per cent of the respondents, checked the WISC. The Nebraska Test of Learning Aptitude was checked by 50 per cent of the respondents. Other tests not shown in Table 6, but mentioned by administrators, were the Randall's Island Performance Series, Bender-Gestalt, Snijders Oomen, Merrill Palmer, Vineland, Chicago Non-verbal, and Peabody Picture Vocabulary Test. One administrator reported that children under seven years of age were not routinely tested.

Table 6. Tests Preferred to Obtain Estimates of Intelligence on Children Under Seven Years of Age (53 Administrators Responding)

Name of Test	Number of Responses	Percentage of Responses
Wechsler Intelligence Scale for Children (Non-verbal)	29	55
Nebraska Test of Learning Aptitude	26	50
Leiter International Performance Scale	24	45
Goodenough: Draw-a-man	21	40
Arthur Point Scale of Performance Test	6	11
Ontario School Ability Examination	5	9
Pintner Non-language Mental Test	5	9
Raven Progressive Matrices Test	4	7
House-Tree-Person Test	3	6

3. Criteria for Admission

Administrators were asked whether minimum intelligence test scores are used as a basal criterion for admittance to residential schools for the deaf. Nineteen administrators, or 34 per cent of the respondents stated that a minimum intelligence test score is used as a criterion for

admittance to their school.

Table 7 provides data pertinent to minimum intelligence quotients needed for admittance to residential schools for the deaf, as reported by administrators. The "minimum I.Q. scores" needed for admittance to residential schools for the deaf ranged from 50 to 90, as reported by 22 respondents. The mean I.Q. score was 71.

Table 7. Minimum I.Q. Score Needed for Admittance to Residential Schools for the Deaf (22 Administrators Responding)¹

Question	Highest Score	Lowest Score	Mean Score
What is the minimum I.Q. score needed for admittance?	90	50	71

¹Note that three more administrators responded to this question than responded affirmatively to the preceding item.

Administrators were asked to check criteria, in addition to low intelligence, which would serve as a basis for not admitting children to their school. Table 8 shows the criterion items and the number of times each item was checked by administrators.

Other criteria reported by administrators which would serve to exclude children were "immaturity", "language difficulties not associated with deafness", "inability to get along", "brain injury", "aphasia", and "amount of Hearing".

Table 8. Criteria Used as a Basis for Exclusion from Schools for Deaf (55 Administrators Responding)

Criteria	Number of Responses	Percentage of Responses
Blindness	50	91
Lack of Toilet Training	43	78
Crippling Conditions with Limited Ambulation	42	76
Behavior Problems	32	58
Chronic Medical Problems	28	51
Seizures	23	42
Partially Seeing (20/70 -- 20/200)	15	27

Most administrators reported that their schools require interviews with parents at the time their child is presented for admission. Table 9 shows the number and percentage of residential schools which require an interview with parents when processing a child for admission. A total of 52 administrators (93 per cent) of the 56 administrators who responded to this question, indicated that an interview with parents is required.

Table 9. Schools Requiring Interviews with Parents (56 Administrators Responding)

Question	<u>RESPONSES</u>			
	Number	<u>Yes</u> Percentage	Number	<u>No</u> Percentage
When processing a child for admission, is an interview with parents required?	52	93	4	7

Trial placement is also employed by most schools in instances where mental retardation is suspected. Table 10 indicates the number and percentage of administrators who reported that a trial placement is utilized for the purpose of determining the final placement of children with an obtained intelligence quotient of less than 83. Of the 53 administrators who replied to this question, 50 administrators (94 per cent) stated that a trial placement is used to help determine the final placement of deaf children with low intelligence.

Table 10. Utilization of Trial Placement (53 Administrators Responding)

Question	<u>RESPONSES</u>			
	Number	<u>Yes</u> Percentage	Number	<u>No</u> Percentage
Is a trial placement utilized in determining the final placement of children with less than 83 I.Q.?	50	94	3	6

The period of the trial placement, as reported by various administrators, extends from one month to more than one year.

4. Prediction of Success

Administrators who could accept I.Q. as one of the criteria for defining mental retardation were asked to specify an upper I.Q. limit which they might use to define mental retardation. Of 24 responses, the highest limit suggested was 90; the lowest, 70; and the mean was 84.7.

Asked to indicate a "minimum" I.Q. needed by deaf children to be successful in residential schools for the deaf, 38 administrators responded as indicated in Table 11.

Table 11. Minimum I.Q. Needed for Success in Schools for the Deaf (38 Administrators Responding)

<u>Question</u>	<u>Highest</u>	<u>Lowest</u>	<u>Mean</u>	<u>SD</u>
What is a reasonable minimum I.Q. needed by a deaf child to be successful in your school?	90	50	80.1	9.3

In addition to the 38 administrators who checked a single I.Q. score and did not attempt to define "success," nine administrators clarified their responses by stipulating what they meant by "success." The following comments were made with respect to I.Q. scores and educational success.

"Successful? We have some children slightly below 70 and we keep them if they are not a custodial problem. We feel we can give a child of 70 (give or take 5 points) an education that helps him relate to society in a minimal way. To receive as much as a fifth grade education and be employable, it generally requires an I.Q. of 85 to 90."

"An I.Q. of 110 is needed for success in the academic program, 95 for vocational success, and 85 to 90 for certificate of attendance."

"An I.Q. of 85 to complete the program successfully, 65 to complete the elementary instructional program, and 55 to be considered for a program for educable deaf children."

"An I.Q. of 100 for academic success, 75 for vocational, and 50 for a certificate of attendance."

"An I.Q. of 90 is needed for graduation. Many children with a lower I.Q. will benefit, but not be successful if the criterion for success is graduation."

"A minimum I.Q. of 110 is required for success at the first track. For success at the second track, 95 to 105."

"To remain in school and make academic progress for seven or eight years, an I.Q. of 90 is needed."

"An I.Q. range of 84 to 73 in performance tests would be successful only in classes geared to slow learners."

"An I.Q. of at least 90 is needed for graduation."

When asked to express an opinion on the potential of mentally retarded deaf children for the acquisition of speech, 30 administrators indicated the potential of such children was less than that of deaf children of "normal intelligence", 19 indicated they were not sure, while 4

were of the opinion that the potential was about the same (Table 12).

Table 12. Potential of Mentally Retarded Deaf Children for Acquisition of Speech (53 Administrators Responding)

<u>Question</u>	<u>Administrative Response</u>	
	<u>Number</u>	<u>Percentage</u>
In your opinion: the potential of deaf children below 83 I.Q. for acquisition of speech is:		
About the same as deaf children with normal intelligence	4	7
Less than deaf children with normal intelligence	30	57
I am not sure	19	36

B. Organization for Instruction

1. Questions for Administrators

Table 13 presents data on the number of classes for MRD children currently being conducted in residential schools for the deaf. A total of 40 school administrators reported 162 classes for MRD children in their schools with a mean of four classes per school. One school reported having 11 classes. An observation was made by administrators that not all children in each class had I.Q.'s below 83.

Table 13. Number of Classes for Mentally Retarded Deaf Children

<u>Number of Schools Reporting Classes</u>	<u>Total Classes Reported</u>	<u>Mean Per School</u>	<u>Most in One School</u>
41	162	4	11

Table 14 shows the criteria used as a basis for instructional grouping for classes of deaf children with low intelligence. Only two administrators checked a single criterion. Most administrators checked from two to five criteria. The criteria which were checked most often were chronological age and achievement scores, each checked 30 times. However, in only one instance was either of these variables checked singly. Other variables used as a basis for grouping which were reported by administrators were "amount and use of hearing and speech," "communicative ability," "teacher judgment" and "classroom performance."

Table 14. Criteria for Grouping for Instruction (37 Administrators Responding)

<u>Placement Criteria</u>	<u>Number of Respondents</u>
Chronological age	30
Achievement Scores	30
Social Maturity	20
Mental age	19
Intelligence Quotient	17
Height/Weight	1
Sex	1

Administrators were asked to indicate whether or not the daily class activity of the MRD children differs from those children above 83 I.Q. (Table 15). Twenty-one administrators (47 per cent) stated that there was a difference between the daily class activities of children above 83 I.Q. Twenty-four administrators, or 53 per cent of the respondents replied that there were no differences in daily class activities.

Table 15. Difference in Daily Activities as a Function of I.Q. (45 Administrators Responding)

<u>Question</u>	<u>Yes</u>		<u>No</u>	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
Do the daily class activities of mentally retarded deaf children differ from those of deaf children of above 83 I.Q.?	21	47	24	53

Administrators were asked to list differences in daily class activities for classes of MRD children. The most frequently listed difference, "special vocational provisions," was listed by 17 administrators. Fourteen administrators indicated their classes for MRD children were "self-contained." Other differences in daily class activities reported by administrators are shown in Table 16.

Table 16. Differences in Daily Class Activities of Special Classes for Mentally Retarded and Regular Classes for the Deaf (25 Administrators Responding)

<u>Differences in Daily Class Activities</u>	<u>Administrative Response Number</u>	<u>Percentage</u>
Have special vocational provisions	17	68
Are self-contained	14	56
Have unit-plan coordinating practical project work with language	11	44
Have more time for practical home-making	11	44
Have more unit-plan work	8	32
Have special arts and crafts	8	32
Are departmentalized	7	28
Have extra time for language	6	24
Have extra time for reading	4	16
Follow a special extra-curricular program	1	4
Have special dormitory arrangements	0	0
Have less time allotted for extra-curricular activities	0	0
Do not participate in athletics	0	0

2. Questions to Teachers

a. Class Enrollment

Teachers were asked to list the number of MRD children in their classes. Table 16 provides information concerning numbers of children in classes for MRD children.

A total of 144 teachers provided information on class enrollment. Examination of Table 17 shows that 1018 children were reported by teachers as being in special classes for the mentally retarded. Class size ranged from 19 pupils to 2 pupils, with a mean class enrollment of 7.1.

Table 17. Class Enrollment (144 Teachers Responding)

<u>Total children Enrolled</u>	<u>Mean Class Enrollment</u>	<u>Largest Class Enrollment</u>	<u>Smallest Class Enrollment</u>
1,018	7.1	19	2

Table 18 shows the chronological age range for children in classes for MRD children. Of the children reported by 124 teachers, the highest chronological age was 22 years and the lowest chronological age reported was three years. The mean chronological age range per class was 3.3 years.

Table 18. Chronological Age Range of Children in Special Classes for Mentally Retarded Deaf Children (124 Teachers Responding)

<u>Highest Chrono- logical Age</u>	<u>Lowest Chronological Age</u>	<u>Mean C.A. Range Per Class</u>
22	3	3.3

Teachers were asked to give an opinion as to whether the number of students in their classes for deaf retarded children was too large, about right, or too small. The responses were summarized in Table 19. Forty-eight teachers

(36 per cent) felt that the number of students in their class was too large, 84 teachers (63 per cent) felt that the class size was about right, and 2 teachers (1 per cent) felt that their class size was too small. The figures listed in Table 19 should be interpreted as numbers and percentages of teacher responses rather than numbers of students.

Table 19. Suitability of Class Size (134 Teachers Responding)

	<u>Teacher Responses</u>					
	<u>Too Large</u>		<u>About Right</u>		<u>Too Small</u>	
	<u>No.</u>	<u>Percentage</u>	<u>No.</u>	<u>Percentage</u>	<u>No.</u>	<u>Percentage</u>
The number of students in my class is:	48	36	84	63	2	1

b. Physical Characteristics of Classrooms

Table 20 shows teacher judgments with regard to how their classroom compares to other classrooms in the school on certain selected variables. On all of the factors, a majority of the teachers were of the opinion that their rooms were comparable to other classrooms in the school.

Table 20. Adequacy of Classrooms for Mentally Retarded Deaf Pupils Relative to Other classrooms in School

	<u>Number of Teachers</u>	<u>Teacher Response</u>					
		<u>My room is better</u>		<u>My room is about the same</u>		<u>My room is less than adequate</u>	
		<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Physical Space	150	20	13	117	78	13	9
Location	149	30	20	112	75	7	5
Furniture	147	19	13	120	82	8	5
Equipment	149	10	7	123	85	16	11
Storage Space	148	13	9	107	72	28	19
Lighting	148	9	7	109	81	15	11
Instructional Supplies	147	7	5	125	85	15	10

Table 21 shows the primary mode of communication used by teachers in teaching MRD children in their classes. Forty-four teachers (32 per cent) reported the use of the oral mode, and 22 teachers (16 per cent) reported use of the manual mode. The largest number of teachers, 73, representing 52 per cent of the respondents, indicated that they use both modes simultaneously.

Table 21. Expressive Communication Modes Used to Teach Mentally Retarded Deaf Children (139 Teachers Responding)

	<u>Oral</u>	<u>Manual</u>	<u>Simultaneous</u>
Number of Teachers	44	22	73
Percentage of Teachers	32	16	52

C. Teachers of Mentally Retarded Deaf Children

1. Basis for Assignment

Administrators were asked to check the criteria used as a basis for the assignment of teachers to classes for deaf children below 83 I.Q. Table 22 shows the number of administrators who checked each criterion item. The criterion item receiving the most checks was "Teacher has high tolerance for limited educational progress." Other comments made by administrators were: "We attempt to orient all teachers to this segment of our population;" "We assign whoever we can persuade to take the class;" "Classes progress to teachers in regular procedure with no attempt to assign any particular teacher to these classes."

Table 22. Criteria for the Assignment of Teachers to Classes for Mentally Retarded Deaf Children (43 Administrators Responding)

<u>Criteria</u>	<u>Administrative Response</u>
Teacher has a high tolerance for limited educational progress	31
Teacher prefers to teach such children	24
Teacher is well adjusted	20
Teacher is specially trained to teach deaf children below 83 I.Q.	15
The teacher has hearing loss	6
Teacher is adept in manual method	9
Superior teachers are assigned to classes for retarded deaf	5
New teachers should start here	1
Teacher has not been successful in regular classes	1
Teacher is not capable of teaching orally	0

2. Preferences of Teachers

Teachers were asked whether they were teaching MRD children by choice or by administrative assignment. Table 23 reveals that 33 teachers were teaching MRD children primarily by choice, and that 117 teachers were teaching primarily by administrative assignment.

Table 23. Personal Choice or Assignment of Classroom Teacher
(150 Teachers Responding)

	<u>Number of Teachers</u>	<u>Percentage of teachers</u>
Teaching by Choice	33	22
Teaching by Administrative Assignment	117	78

When teachers were asked if they preferred to teach children with mental retardation in addition to deafness, or deaf children with no other disability, 98 teachers (66 per cent) reported that they preferred to teach deaf children with no other disability. Forty-two teachers (28 per cent) indicated a preference to teach MRD children, and 8 teachers (5 per cent) had no preference, as shown by Table 24.

Table 24. Preference for Teaching Mentally Retarded Deaf Children with no other Disability (148 Teachers Responding)

<u>Preference</u>	<u>Responding Teachers</u>	
	<u>Number</u>	<u>Percentage</u>
Prefer to teach children with mental retardation in addition to deafness	42	28
Prefer to teach deaf children with no other disability	98	66
No preference	8	5

3. Hearing of Teachers

Administrators were requested to list the number of

teachers with identifiable hearing loss in their schools who teach deaf children with low intelligence. The responses are summarized in Table 25. A total of 65 teachers with identifiable hearing loss were listed by administrators. This total represents 43 per cent of the 150 teachers of classes for MRD children reported by administrators of residential schools for the deaf.

Table 25. Use of Teachers with Hearing Loss Who Teach Mentally Retarded Children (41 Administrators Responding)

	<u>Number</u>	<u>Percentage</u>
Teachers with Hearing Loss	65	43
Teachers with no Hearing Loss	85	57

Administrators were asked to indicate the effectiveness of teachers of MRD children, with respect to the teacher's hearing, by designating whether the more effective teacher was one with normal hearing or one with hearing loss, or whether the teacher's hearing is irrelevant. Thirty-five administrators or 76 per cent of the 46 administrators who answered this question were of the opinion that hearing loss is irrelevant in evaluating the effectiveness of classroom teacher of MRD children. One administrator made the point that the effectiveness of the teacher depends upon the oral potential of the pupils.

4. Professional Preparation and Certification

One hundred thirty-four teachers of mentally retarded deaf children provided information relative to their college training. Amount of college training ranged from six teachers who reported no college training to one teacher who reported 48 semester hours beyond the Master's degree. An analysis of the college training of the teacher respondents is presented in Table 26.

Table 26. Level of College Training of Teachers of Mentally Retarded Deaf Children (134 Teachers Responding)

	<u>Number</u>	<u>Percentage</u>
No college training	6	4
College training but no degree	18	14
Bachelor's degree	31	23
Graduate training but no graduate degree	52	39
Master's degree	12	9
Master's degree plus	15	11

Table 27 provides information concerning the certification of teachers of MRD children. The number of teachers who have state and/or professional association certification to teach deaf and/or mentally retarded children is presented.

Table 27. State and/or Professional Certification (147 Teachers Responding)

	<u>Mental Retarda-</u> <u>tion only</u>	<u>Deafness</u> <u>only</u>	<u>Both</u>	<u>Neither</u>
Number of Teachers	3 (2%)	101 (69%)	16 (11%)	27 (18%)

5. Expressed Need for Additional Training

Teachers of mentally retarded deaf children were asked whether they felt a need for additional training to teach these children. As indicated in Table 28, 86 per cent stated the need for additional training.

Table 28. Expressed Need for Additional Training (147 Teachers Responding)

	<u>Yes</u> <u>No.</u>	<u>No</u> <u>No.</u>
Do you feel the need for additional training to teach mentally retarded deaf children?	127 (86%)	20 (14%)

Teachers were asked to rank the kinds of additional training which they felt would not be most beneficial for teaching MRD children.* "Coursework in mental retardation" was ranked by first the largest number of teachers, 43.

Table 29 shows the ranking of the alternative kinds of training.

*Respondents were presented with a series of choices which they were to rank according to importance, with number one being the most important and number five the least important. Some teachers assigned the same rank to more than one choice.

Table 29. Kinds of Additional Training Needed (150 Teachers Responding)

<u>Kind of Training</u>	<u>Number of Teachers Who Ranked This Item:</u>				
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Course work in mental retardation	43	32	20	16	7
In-service training	37	13	11	11	14
Course work in deafness	31	15	21	15	6
Student teaching with deaf children	29	20	13	8	9
Student teaching with mentally retarded children	27	19	15	16	19
Course work in psychology	19	15	19	23	12
Course work in child development	13	13	17	14	23
Course work in speech and hearing	7	3	6	6	14
Course work in sociology	6	5	4	11	13

D. Prevalence and Prognosis in Six Schools

Information in this chapter is based upon returns from six public residential schools. The administrators of these six schools had expressed interest in cooperating in this aspect of the investigation which involved checking through all files on students presently enrolled. The data

were collected by school psychologists in three of the schools and by school principals in the three remaining schools.

Because of the procedures in selecting the six schools, basically the interest of administrators in participating in a somewhat time-consuming task, it should not be implied that the following information is representative of more than the six schools.

1. Prevalence Data

The total population of the six schools which participated in the collection of psychological data was 1,632. A total of 304 pupils with an I.Q. of 83 or below were reported enrolled in these six schools. Therefore, 19 per cent of the pupils enrolled in the six schools included in this sample functioned in terms of measured intelligence as mentally retarded. Table 30 shows the distribution of MRD children in these schools.

Table 30. Percentage of Children Below 83 I.Q. in Six Public Residential Schools (Total enrollment 1632)*

<u>School</u>	<u>Percentage of Total Enrollment</u>
1	29
2	23
3	21
4	22
5	10
6	6

*Total MRD children - 304

Respondents were asked whether intelligence tests were helpful in formulating plans for each of the 304 students listed. For 302 of the 304 students, it was reported that intelligence tests had been helpful in developing programs for them.

2. Classification of Children Below 83 I.Q.

Of the 304 deaf children with I.Q.'s below 83, 132 (43 per cent) were classified as "mentally retarded" by their school staffs. Three of the six residential schools did not classify any pupils as "mentally retarded." One psychologist reported that children with low intelligence in his school were not given any classification. The principal of the school reported that "Children aren't labeled as 'mentally retarded' and the term 'mentally retarded' is not generally used in my school." He further stated:

We certainly feel that we don't have 67 mentally retarded pupils in our school and our identification of them and provisions made for them would vary considerably from the attached sheets. We have pupils who do not appear on the list who function as mentally retarded, and we have some on the list whom we don't consider mentally retarded, nor do they function as such.

3. Children with Additional Disabilities

Respondents were asked to list other disabling or handicapping conditions present in each child, in addition to deafness and intellectual deficit. Seventy-three children were reported to have a third disability. The 73

children represent 24 per cent of all children below 83 I.Q. in the six schools in this sample.

Respondents were asked to give an opinion of which of the child's handicapping conditions they considered to be most educationally significant. Hearing loss was reported to be the most educationally significant in 188 cases or 62 per cent of the 304 children below 83 I.Q. (Table 31).

Intellectual deficit was reported to be most educationally significant in 46 cases (15 per cent). Of the "other" disabilities listed as being most educationally significant, the most frequently occurring disability was "emotional disturbance," listed six times.

Table 31. Disabilities Considered to be of Most Educational Significance in Six Residential Schools for the Deaf (N=304 Children Below 83 I.Q.)

	<u>Hearing Deficit</u>	<u>Intellectual Deficit</u>	<u>Other</u>	<u>Disabilities Equally Significant</u>	<u>None Listed</u>
Number	188	46	15	36	19
Percentage	62	15	5	12	6

4. Prognosis

Respondents were requested to estimate the approximate grade level expectancy for each child listed below 83 I.Q. The psychologist of one school stated that it was impossible

to estimate a grade level expectancy for the 15 children below 83 I.Q. in that particular school. The principal of another school reported that it was possible to estimate the grade level expectancy of the older students, but for the younger students, it was too difficult. The psychologist at a third school provided information on the kind of certificate a child would be able to obtain rather than an estimate of his grade level.

A total of 197 children were included in the schools in which a specific grade level expectancy was listed for each child. Not included in this total are the 107 children whose school psychologist did not provide specific grade level expectancies.

Of the 197 children in schools which listed grade level expectancies, respondents indicated that it was not possible to estimate a grade level expectancy for 80 children. Therefore, examination of Table 32 discloses that a grade level expectancy was predicted for 117 children.

Table 32. Grade Level Expectancy of Deaf Children Below 83 I.Q. in Six Residential Schools for the Deaf (N=117)

	<u>Grade Level Expectancy*</u>							
	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	<u>4th</u>	<u>5th</u>	<u>6th</u>	<u>7th</u>	<u>8th</u>
Number of Children	4	8	17	39	29	16	5	3
Percentage of Children	3	7	14	33	21	14	4	3

*Mean Grade Level Expectancy is 4.3

Table 33 shows an estimate of the kind of certificate expected to be obtained by the children below 83 I.Q. in the school whose responding staff member reported the information in this manner rather than reporting specific grade level expectancies.

None of the 107 children with intelligence quotients below 83 in this school were expected to receive an Academic Diploma. It was predicted that 56 children (52 per cent) would acquire a Vocational Diploma, and 51 children (48 per cent) would obtain a Certificate of Attendance.

Table 33. Estimate of Kind of Certificate Attainable by Deaf Children Below 83 I.Q. in one school (N=107)

Estimate of children who will receive:	<u>Kind of Certificate or Diploma</u>		
	<u>Academic Diploma</u>	<u>Vocational Diploma</u>	<u>Certificate of Attendance</u>
Number	0	56	51
Percentage	0	52	48

E. Proposed Organization of Services

1. Increased Demand for Services

Administrators were asked if there was an increasing demand to provide services for pupils with low intelligence in addition to deafness. Forty-three administrators (78 per cent) reported that there is an increasing demand, while 12

administrators (22 per cent) stated that there has been no increasing demand that their school provide services for deaf children with low intelligence.

Table 34. Increasing Demand for Services for Mentally Retarded Deaf Children (55 Administrators Responding)

	<u>Administrative Response:</u>	
	<u>Yes</u> <u>Number</u>	<u>No</u> <u>Number</u>
Is there an increasing demand for you to provide services for pupils with low intelligence in addition to deafness?	43 (78%)	12 (22%)

2. Future Developments in Educational Planning

One of the objectives of this study was to attempt to look beyond the current status of provisions and services for the education of MRD children and to obtain some judgments and opinions as to what might be more effective ways of providing for the education of mentally retarded deaf children.

Table 35 shows the rank which administrators assigned to five alternative solutions for providing housing and education for MRD children. Twenty-two administrators (43.1 per cent) stated that their preference would be a separate facility for MRD children.

Table 35. Choice of Facilities for the Education of Mentally Retarded Deaf Children (51 Administrators Responding)

Facility	<u>Ranked By Administrators</u>				
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
In a separate facility for mentally retarded deaf children	22	7	8	0	11
In residential schools for the deaf with special provisions for the mentally retarded deaf	12	13	7	5	12
In day schools or classes for the deaf with special provisions for the mentally retarded deaf	4	9	12	18	5
In residential schools for the mentally retarded with special provisions for the deaf	11	15	12	18	5
In day classes for mentally retarded with special provisions for the deaf	2	6	11	15	17

Forty-three administrators stated what they considered to be optimum provisions for mentally retarded (below 83 I.Q.) deaf children, assuming finances and legislation were no deterrent. Length of responses ranged from one sentence to an entire page. Responses were categorized as follows and appear in Appendix D.

- A. Facilities for the Education of Mentally Retarded Deaf Children**
 - 1. Separate Facilities
 - 2. Day Programs
- B. Special Services**
 - 1. Curriculum
 - 2. Parent Counseling
 - 3. Opportunity for Socialization
- C. Qualifications for Teachers and Houseparents**
 - 1. Teachers
 - 2. Houseparents

V. DISCUSSION

A. Admission Policies and Procedures

1. Admittance and Referral

A wide variation of admission policies and procedures were reported by administrators of residential schools for the deaf. In the majority of responses (61 per cent) criteria for admittance were based on local operating policy. In general, the responsibility for making the final decision as to whether or not a child is admitted to a school rests with either the Superintendent or a committee, of which the Superintendent is generally a member. In a majority of instances, it appears that local administrators have the prerogative to establish admission criteria.

2. Psychological Assessment

In describing the kinds of professional personnel who administer intelligence tests when they are given prior to admittance of the child, it was found that in seven instances a Supervisor of Instruction administered the tests. This seems to suggest that the function of the supervisor of instruction is broadly defined in these schools.

Several tests are used to measure the intelligence

of children. It is notable that the Wechsler Intelligence Scale for Children (Performance), not specifically designed for use with deaf children, was most widely used. Fifty-five per cent of the responding administrators reported a preference for the WISC. Only 9 per cent of the respondents indicated a preference for the Ontario School Ability Examination, and 9 per cent for Pintner Non-Language Mental Tests. Both tests were designed specifically for the individual examination of deaf children. The Nebraska Test of Learning Aptitude, designed specifically for deaf children, was given preference by 50 per cent of the respondents. The Leiter International Performance Scale, although not specifically developed for use with the deaf, was preferred by 45 per cent of the respondents.

These data reveal that intelligence tests designed specifically for use with deaf children or standardized on deaf populations, are not always the most preferred instruments to test deaf children. Educators of the deaf and psychologists who administer intelligence tests apparently do not lean heavily on instruments specifically designed for the deaf.

3. Criteria for Admission

There are varying views with respect to the use of intelligence test results in making decisions about placing children in residential schools for the deaf. Sixty-six

per cent of the responding administrators stated that a minimum intelligence test score is not a criterion for admittance to their school. Of the 22 schools in which administrators reported that minimum I.Q. scores were needed for admittance to their school, a wide range of I.Q. scores was reported. Scores ranged from 50 to 90 with a mean score of 70 and a standard deviation of 11.5. One might infer that the schools which accept children with I.Q.'s of 50 have broader educational objectives than the schools which do not accept children below 90 I.Q.

A number of criteria in addition to low intelligence serve as a basis for not accepting children in residential schools for the deaf. For example, 91 per cent of the responding administrators reported that they did not admit blind children to their schools. Special facilities for deaf blind children have been established in various parts of the United States and most deaf-blind children are traditionally enrolled in these schools.

It is remarkable that 76 per cent of the schools do not admit children who have crippling conditions with limited ambulation. Even though five administrators stated that in some cases they might accept a child with limited ambulation, the percentage of schools which exclude children with crippling conditions is high.

Seventy-eight per cent of the schools do not accept

children who are not toilet trained. Adequate toilet behavior very likely depends on the age of the child. The school is likely to be more liberal about young children who need assistance at the toilet than with older children.

Approximately 50 per cent of the schools do not admit children with chronic medical problems, although seven administrators qualified their responses by stating that admission would depend on the type or severity of the problem.

Children with seizures are excluded from 50 per cent of the schools. Seven administrators indicated that if the seizures were controlled, children might be admitted.

Children with behavior problems are excluded in about 50 per cent of the schools. However, in seven schools, exclusion would be contingent upon the seriousness of the behavior problems.

A trial placement is utilized to determine the final placement of children with low intelligence in 94 per cent of the schools. This seems to indicate that a large majority of residential schools for the deaf have flexible programs and administrators are not willing to classify a child as being retarded without extended observation of the child's behavior.

4. Prediction of Success

The mean I.Q. thought to be necessary for a child to be "successful" in residential schools for the deaf was 80, as reported by 47 administrators. This score is 4.6 points lower than the mean I.Q. which 24 administrators generally agreed was indicative of mental retardation.

Since "success" was not defined in the questionnaire, administrators were presented with an opportunity to define success in terms of their own particular school. Based on comments by a number of administrators with respect to the I.Q. needed to be "successful" in their schools, it would appear that a score of 80 would not be indicative of much more than the acquisition of "a certificate of attendance" or some type of "vocational certificate," rather than an "academic diploma."

There may be an assumption that the potential of mentally retarded deaf children for acquisition of speech is less than for deaf children with normal intelligence. Fifty-seven per cent of the administrators were of the opinion that this assumption is correct. Further study is indicated to determine whether this is a legitimate assumption.

B. Organization for Instruction

1. Questions for Administrators

There is considerable difference in the nature of

educational services for deaf children with low intelligence in residential schools for the deaf in the sample. Forty-one residential schools for the deaf (75 per cent) provide special educational services for deaf children with low intelligence in the United States.

A variety of criteria were used as a basis for instructional grouping of deaf children with low intelligence. Data suggested that no single criterion was consistently used to group these children.

In 53 per cent of the schools, there were no differences between the daily class activities of mentally retarded deaf children and children above 83 I.Q. Seventeen of the 45 responding administrators reported that their schools provided special vocational services for children below 83 I.Q. Fewer administrators reported other special provisions. An inspection of Table 15 suggests that mentally retarded deaf children, in many schools, may essentially be following the same curriculum as deaf children within the normal range of intelligence. If the daily class activities of retarded deaf children in special classes are not different from the activities of the children in the regular classes, the implication appears to be that children are assigned to special classes merely for the convenience of removing them from the regular classroom. A differential curriculum is generally viewed as crucial in

the education of children with low intelligence. One important objective for educating retarded children is the development of occupational competence through efficient vocational guidance and training as a part of their school experience (Ingram, 1935; Stevens, 1958).

2. Questions for Teachers

The number of special classes for mentally retarded deaf children varies considerably among schools. The number of special classes in a given school is contingent upon such factors as the total enrollment, the criteria for admission to the school, the total number of grades included, the instructional organization, the availability of qualified staff, increasing demand, and attitudes of responsible leadership. Teachers reported a mean class enrollment of 7.1 children per class.

The statement is frequently made that deaf children with low intelligence are usually assigned to inferior school rooms and that classrooms are generally placed in undesirable locations. In most cases, this generalization is not substantiated from findings of this investigation.

The principal criterion reported by administrators for assigning teachers to classes of mentally retarded deaf children was that the "Teacher has high tolerance for limited educational progress." Fifteen administrators reported that

teachers were assigned to classes because they were "Specially trained to teach deaf children below 83 I.Q. There are virtually no teacher training programs which specifically train teachers to teach mentally retarded deaf children. The administrators may have meant that the teachers had some training to teach mentally retarded children in addition to some training to teach deaf children. Twenty-four administrators (56 per cent) reported that teachers were assigned because they preferred to teach such children. There is some discrepancy between their responses and responses from teachers. Only 33 teachers (22 per cent) indicated that they were teaching mentally retarded deaf children by choice, rather than by administrative assignment. Moreover, when teachers were asked if they preferred to teach children with mental retardation in addition to deafness, or deaf children with no other disability, 98 teachers (66 per cent) reported that they preferred to teach deaf children with no other disability. It is apparent that considerably more than half of the teachers of mentally retarded deaf children in special classes would prefer not to teach mentally retarded deaf children.

It is not uncommon to assign deaf teachers to classes for mentally retarded deaf children. An attempt was made to ascertain the number of teachers with identi-

fiable hearing loss who teach retarded deaf children. A total of 65 teachers (43 per cent) with identifiable hearing loss was reported by administrators of residential schools for the deaf. This large total of teachers with hearing loss would appear to have implications for the development of the speech of a significant segment of the children enrolled in residential schools for the deaf if speech is in fact a reasonable objective for mentally retarded deaf children. When asked to indicate the effectiveness of teachers with hearing loss, thirty-five administrators (76 per cent) reported that the teacher's hearing loss was irrelevant as a criterion for effectiveness. One administrator made the point that the effectiveness of the teacher depends upon the oral potential of the pupils.

Most teachers reported inadequacies and deficiencies in their professional training. Six of the 134 classroom teachers of mentally retarded deaf children responding have had no college training. Sixteen teachers chose not to report information relative to college training. It may be that these teachers were embarrassed by not having college training. An additional 20 teachers reported that they did not have a Baccalaureate degree. At least 19 per cent of the teachers of mentally retarded deaf children do not have college degrees. If all of the teachers had responded to this question, it seems reasonable to assume that the per-

centage of teachers who do not have degrees would have been higher. Only 51 per cent of the teachers reported being certified by the Conference of Executives of American Schools for the Deaf. Only 13 per cent reported certification to teach mentally retarded children, and only 11 per cent reported certification to teach both deaf children and mentally retarded children.

A total of 127 teachers (86 per cent) expressed the need for additional training. In ranking the kinds of additional training which they felt would be most beneficial for teaching mentally retarded deaf children, "course work in mental retardation" was ranked first by the largest number of teachers (43), as might be expected. However, 31 teachers ranked "course work in deafness" first, and 29 teachers ranked "student teaching with deaf children" first, a surprising finding among teachers in facilities in which the primary objective is to educate deaf children. It is significant that, while a sizable number of teachers expressed a need for additional training in mental retardation, an even greater number reported a need for training to teach deaf children.

The following excerpt from one of the teacher responses is representative of one point of view:

If I felt courses for helping the deaf mentally retarded were available, I certainly would

take them. In my mind, I cannot accept courses for the teaching of the mentally retarded child as being of value for the teaching of mentally retarded deaf children. . . In other words, I see a completely new field in special education, the education of the deaf mentally retarded child. This child requires special techniques, materials, and curriculum to do him justice.

Although this teacher reported 14 years experience teaching mentally retarded deaf children and had more than 30 semester hours beyond a Master's Degree, she concluded:

I am really pleading for help as a teacher of the mentally retarded deaf. My best is not good enough. The help I need will not come from taking courses on mentally retarded deaf.

It is not clear at this time how professional training of teachers of MRD children should be organized. However, there is no question that practical experience directly with such children is desirable.

The problems which administrators face in recruiting adequately prepared teachers of the deaf are critical. The recruitment of teachers who are qualified by virtue of training, experience, and temperament, to teach mentally retarded deaf children is most difficult.

C. Prevalence

The prevalence data on mentally retarded deaf children provided by 43 administrators of residential schools for the deaf should be interpreted as a gross estimate. In

Some cases administrators indicated that prevalence figures which they reported were merely estimates. In many instances residential school personnel conscientiously checked the records of all children to ascertain the number of children below 83 I.Q. In other cases, it is possible that the time factor and unavailability of staff did not permit an intensive search of the student records. No attempt was made to project the obtained prevalence data to all residential schools for the deaf in the United States or to determine the percentage of mentally retarded deaf children in these schools. A more intensive study should be undertaken to obtain valid prevalence data on mentally retarded deaf children in residential schools for the deaf.

D. Psychological Data on Mentally Retarded Deaf Children in Six Residential Schools for the Deaf

Due to the method used to select the six schools discussed in this section, results are applicable only to six schools and are not considered to be representative of other residential schools for the deaf. Generalizations made with respect to this data should be interpreted cautiously.

The total of 304 children below 83 I.Q. represented 19 per cent of all of the pupils enrolled in the six schools. There was a wide dissimilarity between the numbers

of children below 83 I.Q. reported by each of the schools. The percentages of children below 83 I.Q., as reported by staff members of the six schools, ranged from six per cent to 29 per cent.

Four of the six schools are faced with the task of providing an appropriate education for better than one-fifth of their total population who have I.Q. scores less than 83.

Reports from five of the six schools indicated that intelligence tests were generally helpful in formulating plans for children in these schools.

The findings of the six selected schools relative to definition, classification, and nomenclature of deaf children with low intelligence, were consistent with the results obtained from all the residential schools reporting.

Consistent with traditional thinking, hearing deficit was considered to be more disabling than mental retardation in a majority of cases (62 per cent). "intellectual deficit" was listed as the primary disability in only 15 per cent of the cases.

A grade-level-expectancy at time of graduation was estimated for 117 of the 304 children below 83 I.Q. in the six schools. The mean grade-level-expectancy for the 117 children was 4.3. It is of interest to note the

similarity between the grade-level-expectancy for these children and the grade-level-expectancy for many mentally retarded children who have normal hearing.

Instead of reporting grade-level-expectancies, the psychologist of one school estimated the kind of certificate expected to be obtained by each of the 107 children below 83 I.Q. enrolled in school. Not one child was expected to receive an academic diploma. Only 52 per cent were expected to acquire a vocational diploma, and 48 per cent were expected to achieve no more than a certificate of attendance. There is evident similarity between the maximum attainment of deaf children with low intelligence and educable mentally retarded children, in general.

The similarity between deaf children with low intelligence and educable mentally retarded children may have implications for the education of mentally retarded deaf children. If deaf children below 83 I.Q. generally have a grade-level-expectancy of about the fourth or fifth grade, the implication is clear. A sizable segment of the deaf population will function as adults at about the same level of social adaptation as the educable mentally retarded, with the added burden of marked limitations in oral communication. Young deaf adults will compete with the educable mentally retarded for similar jobs. For some occupations,

the communication deficit of the deaf will indeed, preclude competitiveness with the educable mentally retarded.

It may be that educators of the deaf who are being kind to parents of deaf children with low intelligence by not treating their children as mentally retarded, are doing the parents (and their children) a disservice. Children who are looked upon as mentally retarded, are generally being prepared in schools to earn a livelihood during adulthood. It might be more realistic to recognize the limited functional potential of deaf children with low intelligence. With this as a point of departure, schools can provide appropriate services for these children which will prepare them to function in adulthood at their maximum potential in a manner compatible with their capabilities.

E. Proposed Organization of Service

1. Increased Demand for Services

A total of 78 per cent of the responding administrators indicated that there is an increasing demand for them to provide services for pupils with low intelligence. Of this total, 95 per cent reported that some of these children were not suitable for their programs. However, only 34 per cent of the respondents indicated that they plan to modify their programs in the foreseeable future for deaf children

with less than 83 I.Q. One administrator reported that his State Department of Public Instruction investigated the possibility of expanding modifying present facilities to include services for children in the 66-50 I.Q. range, but decided that the expense involved would be too great. Another administrator indicated that it was possible to modify their existing program to accomodate children below 90 I.Q., but not desirable.

It may be that institutions for the mentally retarded will be asked to provide for deaf retarded children. Lay and professional pressures may lead to the development of separate schools for mentally retarded deaf children. The problem of establishing special facilities for mentally retarded deaf children may be compounded by the differing social philosophies.

F. Future Developments in Educational Planning

One objective of this study was to obtain judgments and opinions as to what might be more effective ways of ultimately providing for the education of mentally retarded deaf children.

Eleven administrators believed that residential schools for the mentally retarded were the most logical facilities to provide services for deaf children below 83 I.Q. Twelve administrators thought that residential

schools for the deaf could best serve mentally retarded deaf children. The largest number of administrators (22) were of the opinion that deaf children below 83 I.Q. could best be served in a separate facility for mentally retarded deaf children.

The administrators' opinions relative to what they considered to be optimum educational provisions for deaf children below 83 I.Q. are categorized and listed in Appendix D.

Administrators tend to lean toward the development of services outside the purview of their own schools. This is generally interpreted to mean the creation of a new organization with separate facilities. It is of some interest that educators of the deaf did not absolve themselves by remanding the problem to existing institutions and agencies serving the mentally retarded.

G. Conclusions

The following specific conclusions were derived from this study:

- (1) There is a wide variation of admittance practices among residential schools for the deaf in the United States.
- (2) In a majority of instances local administrators of residential schools for the deaf have the prerogative to establish admission criteria.

(3) In general, an intelligence test score is not a criterion for admittance to residential schools for the deaf.

(4) Intelligence tests designed specifically for use with deaf children or standardized on deaf populations, are not always the most preferred instruments to test deaf children.

(5) The administrators of most residential schools prefer not to admit children with multiple disabilities.

(6) There is an increasing demand for administrators of residential schools for the deaf to provide services for pupils with low intelligence.

(7) A definition or classification of mental retardation mutually acceptable to residential schools administrators does not exist.

(8) It will be difficult to obtain accurate prevalence data on mentally retarded deaf children until standard definitions, terminology, and nomenclature are adopted by educators of the deaf.

(9) There are considerable differences in extent of special educational and vocational services for deaf children with low intelligence provided by various residential schools.

(10) In most residential schools for the deaf, mentally retarded deaf children follow essentially the same

curriculum as deaf children within the normal range of intelligence.

(11) Special training of teachers is not perceived by most administrators as an important factor in assignment to teach mentally retarded deaf children.

(12) A large number of teachers with hearing loss are presently teaching mentally retarded deaf children in residential schools.

(13) Considerably more than half of the teachers of mentally retarded deaf children in special classes would prefer not to teach mentally retarded deaf children.

(14) Most teachers of mentally retarded deaf children do not feel adequately prepared to teach such children and feel the need for additional training.

(15) There is a striking similarity in the characteristics of mentally retarded deaf children and educable mentally retarded children.

(16) Almost half of the administrators of the opinion that deaf children below 83 I.Q. could best be housed and educated in separate facilities for the mentally retarded deaf.

H. Implications for Practice

The inadequacy of educational services for deaf children with low intelligence should be scrutinized by educa-

tors of the deaf and of the retarded, university faculties responsible for the training of teachers, researchers, parents of the deaf, and vocational rehabilitation specialists.

The results of this study suggest a number of implications for practice and for further study.

There is a need for a conference of educators of the deaf to discuss the problem of standard terminology and nomenclature relevant to deaf children with low intelligence. An educationally conceived definition and classification scheme for retarded deaf children does not presently exist. Agreement by educators of the deaf with respect to terminology and nomenclature is basic to further study. Without standardization of terminology, epidemiological data reported at the national level will be virtually impossible to obtain.

Subsequent conferences should be directed to the problems of developing educational objectives, curriculum guides, and instructional materials for teaching deaf children with low intelligence. Educators of the mentally retarded and other necessary consultants could assist in the development of objectives, curriculum, and instructional material.

As a result of these conferences, a body of knowledge relative to the education of deaf children with low intelligence should begin to be accumulated. An additional

major conference, or conferences, attended by leadership personnel from a variety of disciplines would establish direction and guidelines for such aspects of the problem as the recruitment and training of teachers of retarded deaf children, the vocational rehabilitation of such children, and a concerted effort to ameliorate the negative feelings toward mental retardation which presently exist among many educators of the deaf.

While the implication is clear that teachers of mentally retarded deaf children will need special training, the kind of training needed is not entirely clear. It may be that traditional approaches to the training of teachers of exceptional children are not suitable for training teachers of children with multiple disability. This problem needs further study.

The recommendation should be made that all schools employ a psychologist so that intelligence testing can be used to assist in the identification of retarded deaf children at an earlier age.

I. Implications for Further Research

Basic to further research is the need for a more precise study of the incidence and prevalence of mentally retarded deaf children in both residential schools for the deaf and day schools and day programs for the deaf. This study should be pursuant to the development of standard

terminology and nomenclature with definitions based on a rationale acceptable to educators of the deaf.

The availability of accurate statistics on mentally retarded deaf children will have several significant implications:

(a) Accurate incidence and prevalence data permit projection into the future so that it is possible to determine what provisions will need to be made for deaf children with low intelligence.

(b) Incidence and prevalence data are important in terms of recruitment of teachers and the programs which are concerned with the preparation of teachers.

(c) Incidence and prevalence data are important to those who will be involved with any of the aspects of the deafness--mental retardation diad (e.g., medical profession, audiologists, counselors).

(d) Data on incidence and prevalence will enable the research worker in the education of the deaf to identify the base population with which he works.

(e) Incidence and prevalence data are needed to justify the establishment of vocational training adaptations for the mentally retarded deaf. Such factual data are critical and basic to the problems that are faced when trying to anticipate vocational rehabilitation needs.

(f) Incidence and prevalence data are necessary to justify programs to legislators so that approval will be secured for requested items. Statistics carry much weight when presented to legislators. The administration must have numbers to show the need for services.

Several additional studies may be suggested from this investigation. Useful information would be obtained from an intensive study of the social and occupational adjustment in adulthood, of individuals who functioned as mentally retarded while in residential schools for the deaf. A more detailed study of the grade-level-expectancy of mentally retarded deaf children, executed on a nationwide basis, would also provide valuable information on mentally retarded deaf children.

The provisions for mentally retarded deaf children who are enrolled in facilities other than residential schools for the deaf, and the final disposition of retarded deaf children who are excluded from residential schools for the deaf should be studied.

The results of this investigation suggest that the potential for speech, speechreading skills, and general achievement of mentally retarded deaf children should be intensively investigated.

VI. SUMMARY

An attempt was made to investigate and describe the education of mentally retarded deaf children in residential schools for the deaf in the United States.

The population of this study included all residential schools for the deaf in the United States. A total of 64 of the 80 residential schools (80 per cent) in the United States participated in the study. Information on mentally retarded deaf children was requested from administrators, teachers, and a limited number of psychologists.

Data were obtained on admission policies and procedures, prevalence, special academic and vocational provisions, qualifications of classroom teachers, and judgments of the most effective instructional organization. Data collected from the inquiry schedules were presented in tabular form. Data which could not be quantified were presented in anecdotal form. All administrators and teachers did not respond to all of the questions. The percentage of response varied from item to item.

Responses indicate that most schools for the deaf provide educational services for deaf children within a relatively wide range of intelligence, the major admission

criterion presumably being that the child's "primary disability" is deafness. The prevalence of mental retardation among deaf children appears to be increasing, with attendant increasing public pressure for schools to provide services for these children. There is a general acceptance by educators of the deaf that there is a need for educational services for retarded deaf children. There appears to be some uncertainty as to the most efficacious way to educate such children.

Professional workers responsible for the educational planning for mentally retarded deaf children do not seem to be completely satisfied with the effectiveness of existing psychometric instruments. Educators are uncertain as to the specific objectives for educating deaf children with low intelligence and the methods by which these objectives can best be realized. Teachers expressed concern about their inadequacy to teach mentally retarded deaf children and were uncertain about the kinds of training which they feel would be beneficial to them. A number of teachers expressed the opinion that a combination of course work in the education of the deaf and some course work on the education of the mentally retarded may not be the most effective solution to the training of teachers. Educators of the deaf tend to view deafness as the primary disability when attended by other disabilities.

The results of the study clearly suggest a need to develop more precise nomenclature and an educationally conceived classification scheme for mentally retarded deaf children. Attention should be directed to the development of statements of educational objectives, curriculum guides, and instructional materials for teaching deaf children with low intelligence. Guidelines for the recruitment and training of teachers of mentally retarded deaf children and the vocational rehabilitation of such children should be established by responsible educational leadership. A concerted effort should be made to ameliorate the negative feelings toward mental retardation which seem to exist among educators of the deaf.

There is a need for a definitive study of the incidence and prevalence of mentally retarded deaf children. The social and occupational adjustment of adults who were viewed as mentally retarded while enrolled in residential schools for the deaf should be studied. Investigations which will lead toward making more precise predictions of the grade-level-expectancy of deaf children with low intelligence are viewed as being essential. Alternative provisions for education, care and custody of mentally retarded deaf children who are not eligible for residential schools for the deaf should be scrutinized. The results

of this study suggest that the potential for speech, speech-reading and school achievement of mentally retarded deaf children should be investigated.

A relatively large number of mentally retarded deaf children are enrolled in residential schools for the deaf in the United States. Without extensive changes in the present character of educational services, many of these children will not achieve social competence.

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APPENDIX A

Inquiry Form for Administrators

PITCD

Chief Administrator: _____

School: _____

Address: _____

FORM ONE

INQUIRY TO CHIEF ADMINISTRATOR*

1. Specify the membership (total enrollment) of your school as of April 1, 1965. _____
2. Specify the TOTAL number of deaf children who were admitted to your program during the 1964-1965 school year.

3. Specify the TOTAL number of deaf children below 83 I.Q. currently enrolled in your school. _____
4. Specify the number of deaf children BELOW 83 I.Q. who were admitted to your program during the 1964-1965 school year. _____
5. Is an intelligence test administered routinely to prospective students before they are admitted to your school?
 Yes No
6. If Question 5 is "Yes," by whom?
 Staff psychologist Consulting psychologist
 Classroom teacher Supervisor of instruction
 Other (Specify) _____
7. If the child is admitted without an intelligence test, how much time elapses before the child is tested?
 Less than one year after admittance

*Approximate time for completion of Form: 40 minutes

PITCD

 One year or more after admittance

 A test is generally not administered

8. What test is preferred to obtain measures of intelligence for children under seven years of age?

 Columbia Mental Maturity Scale

 Pintner Non-Language Mental Tests

 Arthur Point Scale of Performance Tests

 Wechsler Intelligence Scale for Children (Non-verbal)

 Raven Progressive Matrices Test

 Hiskey: Nebraska Test of Learning Aptitude

 Ontario School Ability Examination

 Goodenough: Draw-A-Man-Test

 Leiter International Performance Scale

 House-Tree-Person Test

 Other (Specify) _____

9. Has a minimum intelligence test score been established as a criterion for admittance to your program for the deaf?

 Yes

 No

10. If your answer to Question 5 is "Yes," what is the minimum I.Q. score? (Circle appropriate score.)

90	84	78	72	66	60	54	48	41
89	83	77	71	65	59	53	47	40
88	82	76	70	64	58	52	46	39
87	81	75	69	63	57	51	45	38
86	80	74	68	62	56	50	44	37
85	79	73	67	61	55	49	43	36
							42	35

Below 35 (Specify) _____

11. In your opinion, what is a reasonable minimum I.Q. needed

PITCD

by a deaf child to be successful in your school? (Circle appropriate score)

90	84	78	72	66	60	54	48	41
89	83	77	71	65	59	53	47	40
88	82	76	70	64	58	52	46	39
87	81	75	69	63	57	51	45	38
86	80	74	68	62	56	50	44	37
85	79	73	67	61	55	49	43	36
							42	35

Below 35 (Specify) _____

12. What criteria IN ADDITION TO LOW INTELLIGENCE would serve as a basis for NOT admitting deaf children to your school? (Check all that apply.)

- Lack of toilet training
- Chronic medical problems
- Blindness
- Behavior problems
- Partially seeing (20/70 - 20/200)
- Crippling conditions with limited ambulation
- Seizures
- Other (Specify) _____

13. What is the minimum chronological age at which children are admitted to your school for deaf children? (Circle minimum age.)

1	4	7	10	13	16	19
2	5	8	11	14	17	20
3	6	9	12	15	18	21

14. What is the maximum chronological age at which children are terminated from your school for deaf children? (Circle maximum age.)

1	4	7	10	13	16	19
2	5	8	11	14	17	20
3	6	9	12	15	18	21

15. The criteria for admittance to your school are based on:

- Mandated State Law
- Local Policy (Institutional)

PITCD

Permissive State Law

Other (Specify) _____

16. Is a TRIAL PLACEMENT utilized for the purpose of determining the final placement of children with less than 83 I.Q.?

Yes No

17. In general, how long are children with less than 83 I.Q. retained in trial placement?

- | | | |
|-----------------------------------|-----------------------------------|--|
| <input type="checkbox"/> 1 month | <input type="checkbox"/> 4 months | <input type="checkbox"/> 7 months |
| <input type="checkbox"/> 2 months | <input type="checkbox"/> 5 months | <input type="checkbox"/> 8 months |
| <input type="checkbox"/> 3 months | <input type="checkbox"/> 6 months | <input type="checkbox"/> 9 months
(School year) |
- More than 9 months (Specify) _____

18. How many children (if any) with less than 83 I.Q. were enrolled in trial placement in your school for deaf children during the 1964-1965 school year? _____ None

19. When processing a child for admission, is an interview with parents required?

Yes No

20. The FINAL DECISION as to whether or not a child is admitted to your school for deaf children is made by:

- | | |
|--|--|
| <input type="checkbox"/> Superintendent of School for Deaf | <input type="checkbox"/> Consulting psychologist |
| <input type="checkbox"/> Staff psychologist | <input type="checkbox"/> Director of Special Education |
| <input type="checkbox"/> School Principal (or equivalent) | |
| <input type="checkbox"/> Other Person (Specify) _____ | |
| <input type="checkbox"/> A Committee (Specify Composition) _____ | |
- _____, _____
- _____, _____

PITCD

21. If the child is considered NOT ELIGIBLE for the program at your school, what action do you take?

Family is referred to an institution serving the mentally retarded.

Family is referred to an appropriate facility for the child's disability(ies).

Our school takes no action.

Child is referred back to the original referring agency.

Other (Specify) _____

22. How many deaf children were NOT ADMITTED to your program during the 1964-1965 school year because of low intelligence? (Circle appropriate number.)

0							
1	6	11	16	21	26	31	36
2	7	12	17	22	27	32	37
3	8	13	18	23	28	33	38
4	9	14	19	24	29	34	39
5	10	15	20	25	30	35	40

23. How many children enrolled in your program for deaf children were terminated during the 1964-1965 school year because of low intelligence? (Circle appropriate number.)

0							
1	6	11	16	21	26	31	36
2	7	12	17	22	27	32	37
3	8	13	18	23	28	33	38
4	9	14	19	24	29	34	39
5	10	15	20	25	30	35	40

24. Is there an increasing demand for you to provide services for pupils with low intelligence in addition to deafness?

Yes No

25. If the answer to Question 24 is "Yes", are some of these children with low intelligence not suitable for your program?

Yes No

PITCD

26. If you do not now provide for deaf-retarded children, is it possible for you to modify your program to meet the needs of deaf children in the following I.Q. ranges?
- 90-84 --- Yes No 66-50 --- Yes No
 83-67 --- Yes No 49-33 --- Yes No
27. Do you plan to modify your program in the foreseeable future for deaf children with less than 83 I.Q.
- Yes No
28. Rank the responses to this question according to preference, with Number One being the most desirable and Number Five the least desirable. Deaf children below 83 I.Q. can BEST be served:
- In residential schools for the deaf with special provisions for the mentally retarded deaf.
 In day schools or classes for the deaf with special provisions for the mentally retarded deaf.
 In residential schools for the mentally retarded with special provisions for the deaf.
 In day classes for mentally retarded with special provisions for the deaf.
 In a separate facility for mentally retarded deaf children.
 Other (Specify) _____
29. In your school, what term is used to indicate low intelligence? (Check all that apply.)
- Mentally retarded Slow Learner
 Educable mentally retarded Trainable mentally retarded
 Other (Specify) _____ Mentally Handicapped
30. If the term "mentally retarded" is used in your school to indicate low intelligence, is an I.Q. score one of the criteria for defining mental retardation?
- Yes No

PITCD

31. If your answer to Question 30 is "Yes," in terms of I.Q., what is the upper limit used to define mental retardation?

90	84	78	72	66	60	54
89	83	77	71	65	59	53
88	82	76	70	64	58	52
87	81	75	69	63	57	51
86	80	74	68	62	56	50
85	79	73	67	61	55	

32. Indicate the I.Q. ranges for which your school presently provides SPECIAL EDUCATION SERVICES. (Check all that apply.)

90-84 83-67 66-50 49-33

33. How many classes for children with low intelligence (I.Q. 83 or below) are currently being conducted in your program?

(Circle) 1 2 3 4 5 6 7 8 9 10

More than 10 classes (State number.) _____

34. If MORE THAN one class for deaf children with low intelligence is conducted, indicate the basis for instructional grouping. (Check all that apply.)

Chronological Age Height/weight
 Intelligence Quotient Sex Social Maturity
 Mental Age Achievement Scores
 Other (Specify) _____

35. In your opinion what is the most effective basis for grouping deaf children below 83 I.Q.?

Chronological Age Height/weight
 Intelligence Quotient Sex Social Maturity
 Mental Age Achievement Scores
 Other (Specify) _____

PITCD

36. Do the daily class schedules of mentally retarded deaf children differ from those of deaf children above 83 I.Q.?

Yes No

37. If the answer to Question number 36 was "Yes," the daily class schedules are different due to the fact that the classes for the mentally retarded deaf: (Check all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> are self-contained | <input type="checkbox"/> have extra time for reading |
| <input type="checkbox"/> are departmentalized | <input type="checkbox"/> have extra time for language |
| <input type="checkbox"/> have special vocational provisions | <input type="checkbox"/> have special dormitory arrangements |
| <input type="checkbox"/> have unit-plan coordinating practical project work with language | <input type="checkbox"/> do not participate in athletics |
| <input type="checkbox"/> have more unit-plan work | <input type="checkbox"/> follow a special extra-curricular program |
| <input type="checkbox"/> have more time for practical homemaking | <input type="checkbox"/> have less time allotted for extra-curricular activities |
| <input type="checkbox"/> Other (Specify) _____ | <input type="checkbox"/> have special arts and crafts |

38. What criteria are used as a basis for the assignment of teachers to classes for deaf children below 83 I.Q.?

- The teacher has hearing loss.
- New Teachers should start here.
- Teacher is well-adjusted.
- Teacher is specially trained to teach deaf children below 83 I.Q.
- Teacher is not capable of teaching orally.
- Teacher is adept in manual method.
- Teacher has high tolerance for limited educational progress.

PITCD

- Teacher prefers to teach such children.
- Teacher has not been successful in regular classes.
- Superior teachers are assigned to classes of retarded deaf.
- Other (Specify) _____

39. In your school, how many teachers of your classes for deaf children with low intelligence have identifiable hearing loss? (Circle)

1 2 3 4 5 6 7 8 9 10

More than 10 (Specify) _____

40. With respect to hearing, the more effective teacher of deaf children with low intelligence is:

- One who has normal hearing One who has hearing loss
- Hearing loss irrelevant

41. In your opinion, the potential of deaf children below 83 I.Q. for acquisition of speech is:

- About the same as deaf children of normal intelligence.
- Less than deaf children of normal intelligence.
- I am not sure.

42. In general, deaf children with less than 83 I.Q. should: (Check all that apply.)

- Be prepared for custodial care.
- Learn to maintain a state of physical well-being.
- Be educated in an institution for the mentally retarded.
- Learn to live safely.
- Be considered incapable of profiting from academic course work.
- Learn to understand one's self.

FITCD

- Be able to get along with others.
- Learn to communicate ideas.
- Not be housed in a school or class for educable children.
- Learn to use leisure time.
- Be able to achieve academically as well as any other children in the school.
- Learn to travel and move about.
- Not come in contact with deaf children of normal intelligence.
- Learn to be a homemaker.
- Be capable of enjoying life through the appreciation of art, dance, and music.
- Have the benefit of a program designed specifically for their care and protection.
- Learn to manage one's money.
- Have the potential to adjust to the forces of nature.

43. Please indicate what you consider to be optimum provisions for mentally retarded (below 83 I.Q.) deaf children, assuming finances and legislation are not deterrent.

PITCD

APPENDIX B

Inquiry Form For Teachers

School: _____

FORM TWO

INQUIRY TO CLASSROOM TEACHERS*

1. The number of deaf-retarded children in my class is _____.
(as of this date)
2. The chronological age range of children in my class is
from _____ to _____.
3. The mental age range of children in my class is
from _____ to _____.
4. In my opinion, the number of students in my class for deaf-
retarded children is:
 - too large
 - about right
 - too small
5. The PRIMARY method used to teach children in my class is:
 - Oral
 - Manual
 - Both (Simultaneous)
 - Other (Specify) _____
6. Are you teaching mentally retarded deaf children:
 - by choice? by administrative assignment?

* Approximate time for completion of Form: 30 minutes.

Would you PREFER to teach deaf children with:

no other disability?

Mental retardation in addition to deafness?

Would you prefer to teach children who have NO disabling or handicapping conditions?

Yes

No

How does your room compare with other rooms in the school?

	<u>My room is better</u>	<u>My room is about the same</u>	<u>My room is less than adequate</u>
Physical space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Furniture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storage space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Acoustics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Instructional supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How much college training have you had?

No college training

College training

1 year

2 years

3 years

4 years

Bachelor's Degree

From: _____

Post Bachelor's training (in credit hours)

0-6

6-12

12-18

18-24

24-30

More than 30 (Specify) _____

PITCD

Master's Degree equivalent (approved by my employing agency)

Master's Degree From: _____

Beyond the awarded Master's Degree (in credit hours)

0-6 6-12 12-18 18-24

24-30 More than 30 (Specify) _____

11. What kind of state certificate do you now hold?

None Specify: _____

12. Are you certified by any professional association?

Yes No Specify: _____

13. Are you certified to teach: (Check all that apply.)

Mentally retarded children? Deaf children?

Elementary education? Secondary education?

Specify major, if any. _____

Other (Specify) _____

14. Have you had any formal special training to teach deaf children?

Yes No

15. Have you had any formal special training to teach mentally retarded children?

Yes No

16. Have you had any formal special training to teach deaf children with low intelligence?

Yes No

17. With your present professional preparation do you feel adequately prepared to teach mentally retarded deaf children?

Yes No

PITCD

18. Do you feel the need for additional training to teach mentally retarded deaf children?

Yes No

19. What kind of additional training do you feel would be most beneficial for teaching mentally retarded deaf children? Rank responses according to their importance, with Number One being most important and Number Five least important.

- Student teaching with deaf children
- Student teaching with mentally retarded children
- In-service training
- Course work in mental retardation
- Course work in deafness
- Course work in psychology
- Course work in child development
- Course work in speech and hearing
- Course work in sociology
- Other training (Specify)

Other course work (Specify)

20. In general, deaf children with less than 83 I.Q. should: (Check all that apply.)

- Be prepared for custodial care.
- Learn to maintain a state of physical well-being.
- Be educated in an institution for the mentally retarded.

PITCD

- Learn to live safely.
- Be considered incapable of profiting from academic course work
- Learn to understand one's self.
- Be able to get along with others.
- Learn to communicate ideas.
- Not be housed in a school or class for educable children.
- Learn to use leisure time.
- Be able to achieve academically as well as any other children in the school.
- Learn to travel and move about.
- Not come in contact with deaf children of normal intelligence.
- Learn to be a homemaker.
- Be capable of enjoying life through the appreciation of art, dance, and music.
- Have the benefit of a program designed specifically for their care and protection.
- Learn to manage one's money.
- Have the potential to adjust to the forces of nature.
- Learn to earn a living.
- Follow the same curriculum and methods used in teaching deaf children with normal intelligence.

PITCD



21. Attach a copy of your weekly schedule

APPENDIX C**Inquiry Form for Psychologists****FORM THREE****INQUIRY TO PSYCHOLOGIST****OR APPROPRIATE ADMINISTRATIVE DESIGNATE**

1. Tabulate data for all children currently enrolled in the program at the _____ School for the Deaf who have obtained an Intelligence Quotient of 83 or below on at least one test of intelligence.
2. Use as many lines as needed for each child.
3. In column twelve you are asked to list disabling or handicapping conditions in addition to deafness and intellectual deficit. Some examples might be blindness, partial sight, cerebral palsy, cleft palate or lip, crippling conditions, chronic medical problems, or aphasia.
4. If you have any questions, please call collect: Mr. Robert M. Anderson; Area Code 412, 621-3500, Extension 508.
5. When Inquiry Form Three has been completed, please return to the University of Pittsburgh in the self-addressed stamped envelope which has been provided. Please return this form by June 15.

Name of Respondent _____

Position _____

Address _____

Initials of Pupil 113.

No. Day Yr.

Date of Birth

Sex (Mark "M" or "F")

500
1000
2000

Decibel loss in the better ear in the speech range as indicated

Age of child at onset of hearing loss

No. Day Yr.

Date of admittance to this school for the deaf

List all intelligence tests administered to this child

List the non-verbal or performance I.Q. obtained for each test

Were intelligence tests helpful in formulating plans for this child?

Has the child been classified as mentally retarded?

If not, state present classification

List other disabling or handicapping conditions present in this child in addition to deafness and intellectual deficit.

In your opinion, which of the child's handicapping conditions do you consider to be most educationally significant?

Estimate the approximate grade level expectancy for this child

APPENDIX D

**Administrators' Opinions of Optimum Provisions
for Mentally Retarded Deaf Children**

**A. Facilities for the Education of Mentally
Retarded Deaf Children
1. Separate Facilities**

"Our present thinking is that mentally retarded deaf children should be educated in a separate facility and not within the educational setting of a residential or day school for the deaf. However, we are still undecided about what would be a desirable type of facility or program for deaf children with performance IQ's in the normal range, but with learning disabilities, particularly in the areas of language and conceptualization, which appear to be other than, or in addition to, the learning problems associated with deafness."

"It is my feeling that these children should have a self-contained department or center. Some could be filtered back in the regular stream. The department should be staffed with personnel that understands their problems. The program should be geared to their need."

"For children with hearing impairment and mental ability below 50, a separate custodial institution should be provided. For those children whose IQ's range from 50 to 80, a separate institution should be developed to meet their needs. They can learn and many of them should become partially self-sufficient. These children generally require more supervision than is found in residential schools for the deaf."

"As we have indicated, we do not feel that children with 83 IQ are custodial cases. We do think that the deaf need about a 10 point advantage to achieve the same as hearing pupils. Certainly pupils in this range need special help and teaching. We have set up a special program for these pupils, which includes basic academic subjects aimed toward teaching them to get along in life. We know they will not make a living doing any sort of written work so train them to do work they can succeed at, such as janitorial, laundry, kitchen, shoe repair, etc. We would like a special unit aimed toward their needs."

"Separate unit in day or residential arrangement. Trained teachers of the deaf with experience and training in teaching the mentally retarded. In residential situation, counselors should also have special training in both areas."

"For those students between 70-83 I.Q., most residential schools for the deaf could modify their programs to provide a good program. However, for those below 70 I.Q., where the primary handicapping condition is mental retardation, I think that they should be in a separate facility for the mentally retarded with a special program for the deaf."

"A special facility, possibly at a school for mentally retarded for children who cannot be taught in a school for the deaf. Their teachers and houseparents should have special training."

"Special program in schools for the deaf with teachers and a supervisor trained in both areas of exceptionality. Some will need to be cared for in a residential school for the mentally retarded where special provision is made for training because of their hearing handicap."

"I would like to see a completely separate facility for deaf children with learning disabilities. A residential school staffed with teachers, experts, etc., to help these children."

"Regional public residential schools and/or individual state public residential schools geared especially for mentally retarded deaf children or deaf children with additional handicaps."

"A school built and equipped for this group of children. Equipment and facilities to give these children many experiences. Teachers trained in both areas of the deaf and mentally retarded plus a complete research staff to evaluate every procedure to see if it is effective."

"The mentally retarded deaf student should have a separate residential school. (Included suggestions on class size, arrangements, curriculum, vocational program, etc.) Students who develop to the point that it is advisable to have a trial with normal deaf students should have this opportunity. Students who will need custodial care as adults should be transferred to institutions for the mentally retarded while they are young enough to make a good adjustment."

"Separate facilities for this type of child. Could be on a school for the deaf campus."

"A special residential unit or special classes in a large day school program for the deaf so that there can be good homogeneous grouping on the basis of chronological age and mental level."

"A special facility where the emphasis is on vocational training and language and self-help. Of course, this applies solely to those children within the educable and trainable range. For the latter, special protective workshops should be considered, where constant supervision is possible. For those within the custodial range, the sole emphasis must be on self-care, and little in the way of academic or vocational training is possible. They should have separate facilities, but parental and home contacts should be encouraged. They are still humans capable of affection."

"A special and separate residential school for mentally retarded (below 83 I.Q.) deaf children with well-trained teachers and plenty of vocational and academic equipment."

"Public facility for mentally retarded deaf--with special provisions (staff and supervision and facilities) for educating MR and deaf!"

"The optimum provision in my opinion would be a regional facility for the mentally retarded deaf where a complete facility to meet the needs of these students could be met. No state has enough students to provide a complete program. This facility would probably have to have a sheltered workshop facility affiliated with it so that life-time care and employment could be provided for those who need it."

"A separate facility should be provided for those with very low I.Q.'s (say below 60) where they will have a special program geared to their interests and abilities and including lots of pre-vocational or vocational preparation. Highly motivated children of I.Q.'s 60+ can benefit from a special program with normal deaf individuals."

"This question is very broad in scope and most difficult to answer. I believe that separate facilities should be provided for the educable, trainable, and those below even training. These facilities should be erected (the ones for the educable and trainable) within a few miles of a school for the deaf so that there could be interrelationships wherever possible with the normal deaf and maybe later on even with normal hearing children. Where custodial care would be necessary, this facility should be entirely separate."

"A state or regional residential school, properly and fully staffed with professional personnel."

"A separate facility for these children with teachers specially trained to teach them."

2. Day Programs

"A special residential unit or special classes in a large day school program for the deaf so that there can be good homogeneous grouping on the basis of chronological age and mental level."

"Day programs with teachers qualified to handle problems arising from combined disabilities. I emphasize day programs because these children need daily experience in the community in which they are going to live, work, or be maintained. The isolation of many residential programs doesn't permit wide enough experience opportunities for these children. However, in view of our experience with the "normal" deaf who exist in greater numbers than we presently find the mentally retarded deaf, it doesn't seem likely that day programs will be provided for the mentally retarded deaf for the same reasons we don't have them for the general deaf population of school age."

"Day class with special provisions made for the retarded child."

B. Special Services

1. Curriculum

"Well-equipped classroom; adequate supplies and teaching aids; provisions for meaningful experiences."

"A separate facility should be provided for those with very low IQ's (say below 60) where they will have a special program geared to their interests and abilities and including lots of pre-vocational or vocational preparation."

"Continuing assessment of developmental possibilities, individual ways of learning, teaching approaches, opportunities program provides, means of stimulating maximally. Alert, interested, skillful teacher providing optimum environment and "real life" situations from which to learn."

"Special provisions and facilities for educating MRD."

"A special facility where the emphasis is on vocational training and language and self-help. For trainable, special protective workshops should be considered, where constant supervision is possible. For those within the custodial range, the sole emphasis must be on self-care, and little in the way of academic or vocational training is possible."

". . . plenty of vocational and academic equipment."

"I believe that mentally retarded deaf children should be given an opportunity to develop in every way as far as a reasonable program for such development can be established. A "reasonable program" in my mind is one which takes into full consideration the needs and rights of the child, the family, and the public."

"They should be given a chance to get all academic work they can take (and profit by). Any trades they can. All speech and lipreading available and profitable. All the necessary training for living according to their possibilities. All of these will have to be handled individually since you say 83 on down. There are no "general rules" since each deaf child or person can vary so greatly. (I.Q., physical condition, background, and degree of deafness, multiply handicaps)."

"The classroom should be of maximum size and each child should have a walk-away hearing aid for freedom of movement. Teaching materials should include a great deal of remedial materials, pictures and unit projects. Arts and crafts should be part of the provisions. Audio-visual aids should be used extensively. Field trips should be made frequently. The program should be designed to develop the techniques of daily living, economic self-sufficiency, and human relations. Vocational objectives should be set, if possible, for each student."

"The program should be geared to their needs. (MRD)"

"Equipment and facilities to give these children many experiences."

"Program: Children should be identified as soon as possible then placed in special programs. This should be done before leaving a Primary Department. An evaluation should be made as to whether the Association Method (McGinnis or Monsees) would be applicable to these children. Much of the program should deal with meeting the individual needs of students and how they are to get along in the community. When language ability has advanced, students should be given the opportunity to run errands downtown, go on the bus, make purchases and communicate with people downtown.

Vocational work centered around language should be stressed. Requires vocational and language teacher working closely together. Last year of school students should either be placed part time on the job training or take a full load of vocational training.

Class enrollment should be held to a minimal number as possible. Special counselors available for student problems should be on call 24 hours a day.

Provide for reading of simple directions. Care for their own clothing, sewing on buttons, darning stockings, etc.

The objectives of the program should be as follows:

1. Learning to take care of himself.
2. Ability to earn a living.

3. Ability to be an active member in the community.
4. Language sufficient to communicate with fellow workers and friends.

While in school, the curriculum should be based on what the child will absolutely need to know for getting along in the community.

1. Special dormitory facilities should be provided for these students. Students should be given responsibilities in dormitories, to cook, and buy their own food and clean their rooms.
2. Students should have much of their education in self-contained rooms but have the opportunity to mingle with other students.
3. Provide parent counseling center where they will be able to get some understanding of the problem and the objectives that the school is trying to meet for their student.
4. Provide a parent-teacher program.

"Small self-contained classes with time for individualized instruction would be necessary. Auxilliary teachers and programs would be supplementary. The adult rehabilitation program consultant should be brought into the program as the student reaches junior high age and more time should be spent in exploratory and terminal vocational training. Considerable emphasis on work habits and attitudes would be desirable. A part-time work experience should occupy time immediately preceding termination of instructional program."

"We have set up a special program for these pupils which includes basic academic subjects aimed toward teaching them to get along in life. We know they will not make a living doing any sort of written work so train them to do work they can succeed at such as janitorial, laundry, kitchen, shoe repair, etc., We would like a special program and perhaps a special unit aimed toward their needs."

"Curriculum based upon needs of the individual and his capabilities. Opportunity to learn one or more trade skills. Chance to have social interaction with his own kind. Opportunity to compete in sports and physical education programs. Opportunity to achieve success."

"Program geared educationally and socially to their level, but with social contact with deaf and hearing children in some phases such as sports, parties, games, etc."

"They should have a program to fit their needs. A special curriculum should be provided. The academic training should be in close correlation and coordination with their vocational work or activities. I doubt the feasibility of a separate school but there

might be a special department within a school for this group. Their social adjustment and everyday living should be closely counseled by well-qualified counselors. A program of on-the-job work would be provided on a part-time basis on jobs that fit their needs or mentality."

"Small classes so that much tutoring and individual attention could be provided especially in initial stages. Versatile approach to learning according to individual potential. That is, not only manual but auditory reinforcement be used where indicated. Optimum opportunity to learn speech especially through audition--amplification if audiogram suggests it. Full opportunity for extra curricular as well as vocational experiences appropriate to handicap. Opportunity to associate with more normal deaf in social activities. Re-evaluation every few years to assess progress and adjust program for optimum development."

"(State school was advocated.) In this school provisions should be made for psychological services. Also complete medical services. Emphasis should be placed on vocational training. In this connection, a full-time placement officer should be a part of the educational staff."

"Modern, well-equipped buildings. Well-equipped playrooms and playgrounds. Academic classes geared to their learning abilities. Vocational classes, crafts, hobbies. P.E. program, health and safety. Classes in grooming, morals, manners. Appropriate recreation facilities. Opportunities to participate in any and all programs within their abilities. A psychologist on the staff."

"Small classes arranged (a) chronological age (b) mental age (c) behavior. Curriculum geared to meet the needs of individual children and yet flexible for all in the group. Exposure to and training for the practical living conditions of each child's environment at home in the community."

". . . good homogeneous grouping on the basis of C.A. and mental level. . . learn to use any kind of communication possible. The class size should range from 5 to 8."

"The total program should be made up of suitable academic and vocational learning, recreational, athletic and religious activities. From three to twenty-one seems a suitable age range. Class size should be 6 or less for students under 15 years of age. Curriculum should be useful learning adapted to the student's ability. Younger children need moderately large classrooms with play space. Classrooms for students between 7 and 13 should include work benches. The length of the school day for the younger children should be arranged to fit their ability and attention span. Students who are 10 to 15 years of age may need 3 hours of basic and useful academic work and 2 hours of industrial arts and

homenaking. Students who are 16 years old and older could have a 6 hour day. Consideration of their needs and ability should determine the curriculum. The vocational program should include low skilled trades and training for helpers in the higher skilled trades. Trial employment should be part of the last year's program.

"IQ x CA -5 years = possible grade level.

- * I 83-71 Modified program based on individual achievements
- *II 50-70 Educable IQ times 15 CA (constant) -5 years = level of possible relative achievement.
- III 30-50 Trainable General routine tasks and care of oneself--sheltered workshop duties.
- IV Below 30 Custodial Care

* Example of #I a. IQ 83

$$\begin{array}{r} \text{IQ } 83 \\ \times 15 \\ \hline 12.45 \\ - 5.00 \\ \hline 7+ \end{array} = \text{age of normal, beginning kindergarten child.}$$

* Example of #II b. IQ 55

$$\begin{array}{r} \text{IQ } 55 \\ \times 15 \\ \hline 8.25 \\ - 5.00 \\ \hline 3+ \end{array} = \text{level possible in academic program}$$

Z scores involved in above, and it is for below 95 IQ's only. It has no basis by research, but it has usefulness as a guide."

"Such a child should be given the benefit of an enriched environment based on the developmental needs of the children which should include social, emotional, recreational and educational areas. He should be placed with normal children for those parts of the day during which he can profit from the same or similar programs, and be placed with other retardates in the areas in which he is most deficient. His fund of meaningful experiences should be constantly enlarged and repeated. He should be constantly made aware of the language connected with the situation and experience in which he finds himself. Whether these are given in the form of written communication, speech, sign language, finger spelling or by means of combined oral-auditory-visual approaches, they should be based on the philosophy of the school which he attends. Multiple stimuli usually works better than single stimuli. Always there should be emphasis on simplicity, formations that are static, not constantly moving, careful use of visual materials and the meaning in the experience to the child."

"In the final stages and really all through his school life, a properly designed program should lead him to educational goals which are achievable for him and for the attainment of which he is properly praised. They should also finally teach him to earn a

livelihood if that is possible. If not, it should prepare him for acceptance and enjoyment of a more sheltered existence. Psychological and psychiatric as well as social services should be made available for both parents and children regularly. Medical and physical education and physical therapy services should be part of the program. The development of appreciations must not be neglected. Therefore art, music (i.e. pianists) the dance, should be included in the program also."

2. Parent Counseling

"Provide parent counseling center where they will be able to get some understanding of the problem and the objectives that the school is trying to meet for their student. Provide a parent-teacher program."

"Review of each individual pupil by referring agency, school, and parents to determine most advantageous placements with periodic reviews at stated intervals for changes where indicated. Child might function best in day school, residential school for deaf, school for retarded or elsewhere for one period with necessary adjustments later. This involves considerable interagency cooperation."

"Consideration should be given to a year round program with frequent opportunities for visits to their homes. Parental guidance and counseling facilities should be a vital part of any such program."

"Psychological and psychiatric as well as social services should be made available for both parents and children regularly."

"They should have separate facilities, but parental and home contacts should be encouraged. They are still humans capable of affection."

3. Opportunity for Socialization

"Such a child should be given the benefit of an enriched environment based on the developmental needs of the children which should include social, emotional, recreational and educational areas. He should be placed with normal children for those parts of the day during which he can profit from the same or similar programs, and be placed with other retardates in the areas in which he is most deficient. His fund of meaningful experiences should be constantly enlarged and repeated."

"Opportunity to integrate with more normal deaf children if progress warrants it. Full opportunity for extra curricular as well as vocation experiences appropriate to handicap. Opportunity to associate with more normal deaf in social activities."

"Program geared educationally and socially to their level, but with social contact with deaf and hearing children in some phases such as sports, parties, games, etc."

". . .I believe they should have the opportunity to socially associate with all the deaf students. Of course, I am not referring to the very low mental cases, but to the type found in most residential and large day schools for the deaf."

"Chance to have social interaction with his own kind. Opportunity to compete in sports and physical education programs."

"Since many factors are involved in trying to determine the exact intelligence score of a deaf child and since, I feel, 83 IQ is an arbitrary cut-off point which cannot really be justified, the best thing that we can do for our mentally retarded deaf children is not to segregate them but let them work side by side with their "normal" peers. If we segregate them and show them that they are different, they will grow up to be really different. We should provide all the services that we can for all deaf children so that we can make them take their place in the world."

"These facilities (separate for MRD) should be erected (the ones for the educable and the trainable) within a few miles of a school for the deaf so that there could be interrelationships whenever possible with the normal deaf and maybe later on even with normal hearing children."

C. Qualifications of Teachers and Houseparents

1. Teachers

"Adequate provisions for mentally retarded deaf children should include small groups (not more than 8) instructed by a trained teacher of the deaf, who has an interest in the mentally retarded, but who has also been a successful teacher of the average and above deaf."

"Teacher:

1. Require a trained teacher of the deaf.
2. Have the trained teacher of the deaf go on for further schooling with retarded children in the public school.
3. Require such a teacher to rotate from the normal classroom to the mentally retarded deaf every two years.

"Their (MRD) teachers and houseparents should have special training."

"Special program in schools for the deaf with teachers and a supervisor trained in both areas of exceptionality."

"The MRD student should have a separate residential school. It should be staffed by trained teachers and administrators. This training should include that for the deaf, mentally retarded, and those with language disorders."

"Teachers should have special preparation for working with mentally retarded."

"Teacher with training in education of MR as well as deafness."

"The teachers should be prepared as teachers of the deaf and as teachers of the mentally retarded. They should be capable and willing to use any kind of communication possible. These teachers should also have a supervising teacher who is professionally qualified in this field."

"A SPECIAL and SEPARATE residential school for MRD (below 83 IQ). . .with well-trained teachers and plenty of vocational and academic equipment."

"Alert, interested, skillful teacher providing optimum environment and "real life" situations from which to learn."

"Trained teacher of the deaf with classroom experience. Hopefully with minimum training in mental retardation."

"A separate facility for these children with teachers specially trained to teach them."

"A school established by each state. A staff professionally trained to work with these children."

". . .Trained teachers of the deaf with experience and training in teaching the mentally retarded. In residential situation counselors should also have special training both areas."

"Trained teachers."

"They should have a program to fit their needs. . .Their social adjustment and everyday living should be closely counseled by well-qualified counselors."

"Teacher trained for both the mentally retarded and the deaf."

"Teachers trained in both areas of the deaf and mentally retarded plus a complete research staff to evaluate every procedure to see if it is effective."

2. Houseparents

"A special facility, possibly at a school for mentally retarded for children who cannot be taught in school for the deaf. Their teachers and houseparents should have special training."

"Nothing was said in your questionnaire about houseparents. To me this is as important as having teachers who are willing to work with these children. Most problems exist in the dormitories and not in the classroom. Teachers of the deaf who are not trained to work with the retarded nevertheless are professional people and in some way learn to cope with the problem. Not true with most houseparents!"

"These youngsters present many problems in the dormitory, and most houseparents have no idea what to do. They do not know how to correct or counsel with these children. Houseparents often say these children are a bad influence on my other children and while they agree the other children should have a good influence on the retarded they insist it works in reverse. Bad habits are easy to acquire while good habits often take an effort. The houseparent problem is a serious one."