

DOCUMENT RESUME

ED 060 593

EC 041 543

TITLE Characteristics of Hearing Impaired Students Under Six Years of Age, United States: 1969-70.  
INSTITUTION Gallaudet Coll., Washington, D.C. Office of Demographic Studies.  
PUB DATE Feb 72  
NOTE 49p.; Series D, Number 7  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS Age Groups; \*Aurally Handicapped; \*Educational Programs; Hearing Loss; \*National Surveys; \*Preschool Children; \*Statistical Data

ABSTRACT

Data from the Annual Survey of Hearing Impaired Children and Youth are given on the characteristics of approximately 6,400 students under 6 years of age enrolled in special education programs for the hearing impaired during the 1969-70 school year. Statistical tables describe the age, sex, and hearing threshold levels (better ear averages) of the children. Also provided is information concerning type and size of educational programs attended, age at onset of hearing loss, age started education, and whether parents are receiving training to assist in the education of their children. (KW)

ED 060593

EC 041 5435



This research was supported by a grant from the Office of Education, U.S. Department of Health, Education & Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.



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Publication — Series D — Number 7

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SERIES D  
NUMBER 7

***DATA FROM THE***  
**ANNUAL SURVEY OF HEARING**  
**IMPAIRED CHILDREN AND YOUTH**

**CHARACTERISTICS OF**  
**HEARING IMPAIRED STUDENTS**  
**UNDER SIX YEARS OF AGE**  
**UNITED STATES: 1969-70**

Age, sex, hearing threshold levels, type and size of educational programs attended, age started education, age at onset of hearing loss and parent training for approximately 6,400 students under six years of age enrolled in participating special educational programs for the hearing impaired during the 1969-70 school year.

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OFFICE OF DEMOGRAPHIC STUDIES  
GALLAUDET COLLEGE

Washington, D.C.

February 1972

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Neil Murphy, *Statistical Analyst*  
Brenda Rawlings, *Statistical Analyst*  
Patricia Voneiff, *Statistical Analyst*  
Sally Wagner, *Administrative Assistant*

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## **Acknowledgments**

No one ever writes a publication such as this all by himself; a long list of people have made this report possible.

Grateful acknowledgement is made to all those program administrators, audiologists, teachers, secretaries and others who give of their time and talent to provide the Annual Survey with the data for these publications. The names of the programs that have participated in the Annual Survey of Hearing Impaired Children and Youth appear in Appendix III.

The author recognizes and credits the National Advisory Committee whose advice continually has guided the Survey. The members of the committee are listed below:

**National Advisory Committee  
Kenneth R. Mangan, Ed.D., Chairman**

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Edward Carney  
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George W. Fellendorf  
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William C. Stokoe, Jr., Ph.D.  
Armin G. Turechek, Ph.D.  
Geno Vescovi, Ph.D.

Finally, we acknowledge the efforts of the personnel of the Office of Demographic Studies. Their diligent efforts have proven invaluable to this publication and to the Annual Survey generally. In particular, we would like to express our gratitude to the following staff members: Saulius Suziedelis, Mary Clare Wehner and Carol Hodge.

Neil J. Murphy  
Augustine Gentile  
Washington, D.C.  
February, 1972

## ABSTRACT

Data on the characteristics of approximately 6,400 students under six years of age enrolled in special educational programs for the hearing impaired during the 1969-70 school year are contained in this publication. These data were collected as part of the Annual Survey of Hearing Impaired Children and Youth. Statistical tables and summaries are presented depicting the age, sex and hearing threshold levels (better ear averages) of these preschool children. In addition, information is provided about the type and size of educational programs attended by the students, age at onset of hearing loss, age started education and whether or not the parents of these students are receiving training to assist in the education of their children.

Based on records for which information was available, five year old children account for almost 55 percent of the 6,378 students; these data indicate also that 55 percent had a hearing threshold level of 85 decibels or higher; the age at onset of hearing loss occurred at birth for 90 percent of the group. The data also show that almost 50 percent of the students were enrolled in "Day Classes for the Hearing Impaired," and 40 percent were in "Residential or Day School" programs. Almost 50 percent of these students attended school 16 hours or more a week and about 40 percent began their education prior to age three. It is also shown that approximately 50 percent of the students' parents were receiving some training related to their child's hearing loss.

Conducted by the Office of Demographic Studies at Gallaudet College, the Annual Survey of Hearing Impaired Children and Youth receives the major portion of its funds from the Division of Research, Bureau of Education for the Handicapped, Department of Health, Education and Welfare. The program has been established to collect, process and disseminate data on hearing impaired children and youth from birth through college age in the United States.

# **Characteristics of Hearing Impaired Students Under Six Years of Age United States: 1969-70**

Neil J. Murphy

## **INTRODUCTION**

Presented in this publication are data collected by the Annual Survey of Hearing Impaired Children and Youth on about 6,400 hearing impaired students under the age of six years. This publication is the first to be prepared from data collected by the Annual Survey of Hearing Impaired Children and Youth that concerns itself exclusively with children in this age group. This particular age grouping has been singled out for publication due to the increasing emphasis on preschool programs for hearing impaired children. These students were enrolled in special educational programs throughout the United States for the 1969-70 school year. During this interval, data were collected on 35,285 hearing impaired students from birth through college age enrolled in educational programs for the hearing impaired. This report deals only with those hearing impaired students (18 percent of the 35,285 students) who were under the age

of six years as of December 31, 1969. The characteristics described herein include: age and sex of students, hearing threshold levels, age at onset of hearing loss, age started educational training, parent training, the types and sizes of educational programs attended by these students and the number of hours per week they received educational services.

The Annual Survey of Hearing Impaired Children and Youth is currently in its fourth year of operation. This Survey is a continuing program aimed at providing information that may be used to improve educational opportunities for the hearing impaired. Gallaudet College and the Division of Research, Bureau of Education for the Handicapped, Department of Health, Education and Welfare are sponsoring the Survey program. Conducted by the Office of Demographic Studies at Gallaudet College, the purposes of the Annual Survey are detailed further in Appendix I of this publication.

## SOURCES OF THE DATA

During the 1969-70 scholastic year, the Annual Survey directed its data collection activities towards all known special educational programs for the hearing impaired. A total of 570 special educational programs were invited to participate in the Survey. Of the 570 programs asked to participate, 435 (approximately 76 percent) participated. In all, records were received for 35,285 students. This amounted to 80 percent of the estimated enrollment in the 570 programs invited to participate in the Annual Survey. The records on which the information in this report is based were received from all types and sizes of educational programs serving the preschool-age hearing impaired child. Appendix III identifies the programs that participated in the Survey for the 1969-70 school year. Approximately four-fifths of these schools had one or more students under six years of age enrolled in their programs.

As indicated, records were obtained for 35,285 students during the 1969-70 school year. Of this total, 6,378 (18.1 percent) were students under six years of age (Table A). This report describes the characteristics of these preschool-age students.

The basic Survey questionnaire used to collect data on children under six years of age is reproduced in Appendix II. This two page questionnaire (ACHIC-4) contained eight topics, most of which had several sub-items. These topics were selected on the basis of availability of the information and the potential utility of the data to researchers and other professional persons involved in the education of the hearing impaired.

TABLE A: Number and percentage distribution of students under six years of age and six years of age and over, enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age	Number	Percent
All Ages	35,285	100.0
Under 6 years	6,378	18.1
6 years & over	28,907	81.9

## QUALIFICATIONS AND LIMITATIONS OF THE DATA

To correctly use and interpret the data contained herein, one must consider the qualifications and limitations of the data. Based on information available to the Survey, the 6,378 students on whom data in this report are provided, represent about 80 percent of all hearing impaired students under six years of age receiving formal educational instruction from programs known to the Survey during the 1969-70 data collection period. Since that time the Survey has learned of other programs that were providing educational services to hearing impaired students under six years of age during the 1969-70 school year. Based on this later information, it is estimated that this report describes about 65 percent of all these children in preschool programs.

In some instances particular items of information requested were not supplied because the information was unavailable or unknown to participating school programs. When information for a particular characteristic is not reported to the Annual Survey for a large percentage of preschool children, it is difficult to know the true distribution of the characteristic. In this report the variables describing better ear average, age started education and parent training are of particular concern due to the relatively high rate of non-reporting.

Table B indicates for the variables shown in this report the percentage of records for which data were not reported or were not usable. In almost all instances information on size and type of program, age and sex of the students was available. In relatively few instances age was estimated and sex determined by utilizing other information on the records, e.g., the number of years in school and the name of the student. Specific comments about non-reporting rates for each variable are made in the discussion of the data which follows. Also noted are the methods used to summarize, classify and code data. These comments should be carefully reviewed. In spite of the limitations noted here and in later sections, it is believed that the data presented in the tables are of sufficient reliability to be of interest and value to professional persons involved in auditory examinations and educational training of hearing impaired preschool students.

TABLE B: Percentage of records for students under six years of age for which data for selected items were not reported or were not usable: United States, 1969-70 school year

Item	Percent of Records for Which Data Were Not Reported or Were Not Usable
Age <sup>1</sup>	0.0
Sex <sup>1</sup>	0.0
Size of program <sup>1</sup>	0.0
Type of program <sup>1</sup>	0.0
Better ear average <sup>2</sup>	42.7
Number of hours per week students are seen and type of training session	12.5
Age at onset of hearing loss	11.8
Age started education	19.3
Parent training	24.6

<sup>1</sup>Data for these items were edited.

<sup>2</sup>Only 8.6 percent of the records did not report any audiological results, while 34.2 percent did not contain sufficient data to permit computation of better ear averages.

## DISCUSSION OF THE DATA

A description and definition of the characteristics under consideration and highlights of the data are provided in this section. The detailed tables on which this discussion is based appear in a later section.

### Age and Sex

Detailed Table 1 contains the distribution of preschool children by age, sex and hearing threshold levels. Of the total 6,378 students, 51.5 percent were male students and 48.5 percent were female students (Table C). The sex distribution for students under six years of age is similar to the sex ratios for all hearing impaired students enrolled in special educational programs as reported by the Annual Survey in previous publications.

TABLE C: Number and percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by sex: United States, 1969-70 school year

Sex	Number	Percent
<u>Both Sexes</u>	<u>6,378</u>	<u>100.0</u>
Males	3,282	51.5
Females	3,096	48.5

The age of students as used in this publication is based on the chronological age of the child as of December 31, 1969. In the discussion that follows, references to a particular age such as "3 years" means three years of age but not yet four, etc. Table D shows that the 3,478 five year old students account for about 55 percent of the 6,378 children under six years of age. This age group accounted for approximately 10 percent of the 35,285 students of all ages for whom the Survey collected data. This relatively high frequency of students at age five reflects, to a large extent, the rubella epidemic of 1963 and 1964.

Of the 336 students under three years of age, shown in the tables in this report, seven children were under one year of age, 82 children were age one and 247 children were two years of age.

### Hearing Threshold Levels

Distributions of the hearing threshold levels of preschool children are given in this publication in terms of better ear averages. These averages were determined by averaging puretone thresholds for the speech range (500, 1000 and 2000 Hz) in the better ear. Better ear averages are given in decibels according to the ISO<sup>1</sup> standard. For the purposes of this publication, any audiological data reported in the ASA<sup>2</sup> standard were converted to the ISO standard by adding 10 decibels to the ASA average.

In all, data were available to compute better ear averages for 3,652 students (57 percent). Information on this item was not available for approximately 43 percent of the students. Of this percentage, 8.6 percent did not report any audiological results while 34.2 percent reported some findings but not enough data to compute a better ear average as specified above. In detailed Table 1 the category "Unable to

<sup>1</sup>International Organization for Standardization.

<sup>2</sup>American Standard Association.

TABLE D: Number and percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by age, according to sex: United States, 1969-70 school year

Age	Both Sexes		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
<u>All Ages</u>	<u>6,378</u>	<u>100.0</u>	<u>3,282</u>	<u>100.0</u>	<u>3,096</u>	<u>100.0</u>
Under 3 years	336	5.3	174	5.3	162	5.2
3 years - under 4 years	699	11.0	370	11.3	329	10.6
4 years - under 5 years	1,865	29.2	951	29.0	914	29.5
5 years - under 6 years	3,478	54.5	1,787	54.4	1,691	54.6

Compute" means that better ear averages could not be determined by the Annual Survey because results for one or more of the frequencies used to compute the average were not reported by the school. The category "Data Not Reported" refers to those for whom no audiological information was supplied. In some tables these two categories are combined and referred to as "Data Not Available".

Table E summarizes the number and percentage of students by hearing threshold levels according to age. As previously stated, better ear averages were not available for approximately 43 percent of all

students. However, this information was not available for 63 percent of students under three years of age. This could be due to the difficulty involved in giving an audiological examination to a younger child. As the ages of the students increased, the percentage of data not available decreased to 37 percent for five year old children.

Table E also indicates that for each of the age groups the category "85 dB and above" has the largest percentage of children for whom a better ear average could be computed.

If data for the categories "Unable to Compute"

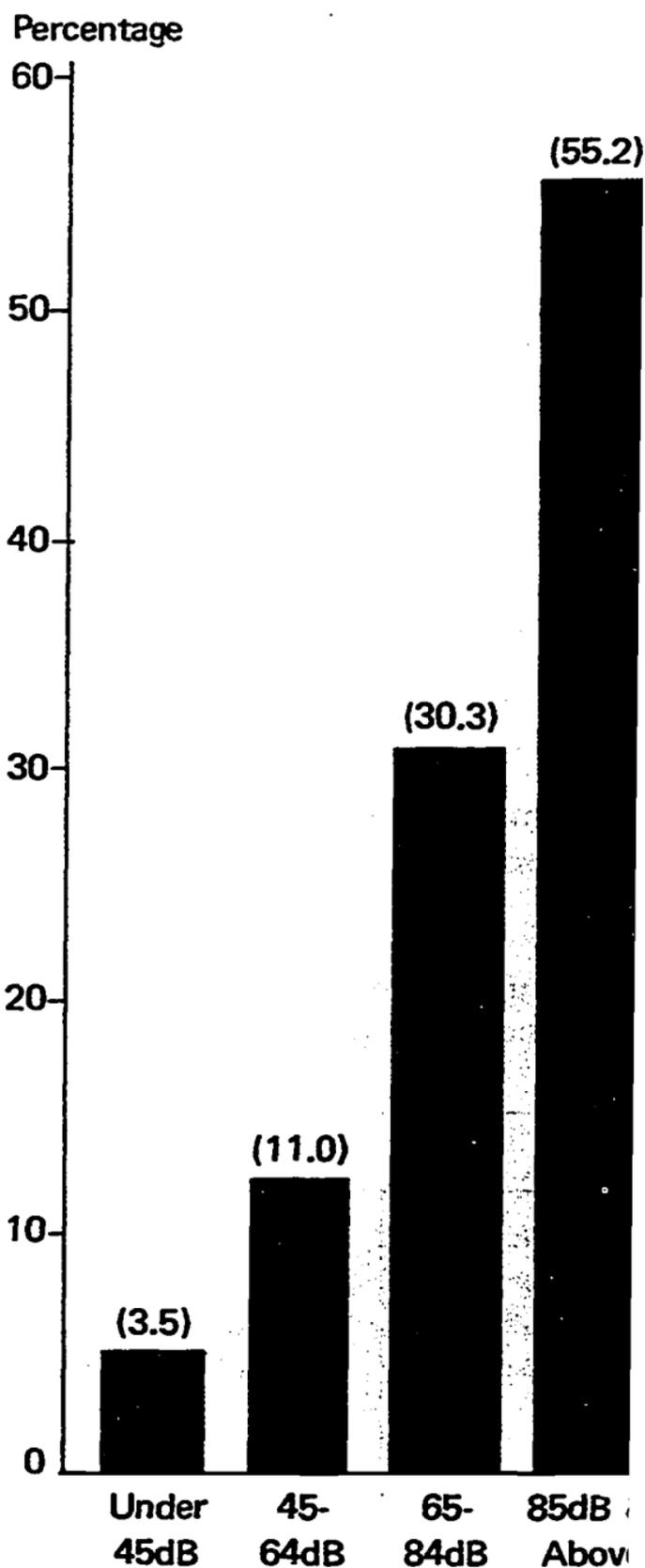
TABLE E: Number and percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by hearing threshold levels, according to age: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO) <sup>1</sup>	Total Number of Students		Age							
			Under 3 Years		3 Years - Under 4 Years		4 Years - Under 5 Years		5 Years - Under 6 Years	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<u>All Hearing Levels</u>	<u>6,378</u>	<u>100.0</u>	<u>336</u>	<u>100.0</u>	<u>699</u>	<u>100.0</u>	<u>1,865</u>	<u>100.0</u>	<u>3,478</u>	<u>100.0</u>
Under 45dB	128	2.0	5	1.5	23	3.3	21	1.1	79	2.3
45 - 64dB	402	6.3	20	6.0	38	5.4	120	6.4	224	6.4
65 - 84dB	1,105	17.3	38	11.3	109	15.6	323	17.3	635	18.3
85dB & above	2,017	31.6	63	18.8	182	26.0	533	28.6	1,239	35.6
Data not available	2,726	42.7	210	62.5	347	49.6	868	46.5	1,301	37.4

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

and "Data Not Reported" are excluded from the computation of hearing threshold levels for present purposes. The data can be seen in Chart 1 and Table F. The data in Table F also indicates that the distribution of hearing threshold levels according to sex was the same for males and females.

**CHART 1: Percentage distribution of students six years of age enrolled in special educational programs hearing impaired by hearing threshold levels: United States, 1969-70**



<sup>1</sup>Omitted from the computation are 2.7% of students for whom data on better ear averages were not available or the data were not usable.

<sup>2</sup>Average hearing threshold in better ear at 1000, 2000 cycles per second.

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**TABLE F: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by hearing threshold levels<sup>1</sup>, according to sex: United States, 1969-70 school year**

Better Ear Averages in Decibels (ISO) <sup>2</sup>	Both Sexes	Males	Females
<u>All Hearing Levels</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Under 45dB	3.5	4.0	3.0
45-64dB	11.0	11.4	10.6
65-84dB	30.3	29.9	30.7
85dB & above	55.2	54.8	55.7

<sup>1</sup>Omitted from the computation are 2,726 students for whom data on better ear averages were not reported or the data were not usable.

<sup>2</sup>Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

**Type of Educational Program**

Detailed Table 2 gives the age distribution and hearing threshold levels according to the type of educational program attended by students under six years of age who participated in the Survey for the 1969-70 school year. Six categories are used to describe the various types of programs attended by preschool hearing impaired children. Each participating school or agency was asked to select or write in the category that best described the type of program in which the child was enrolled. The category "Other" includes a variety of special educational situations which occurred very infrequently (1.7 percent) and consequently were not given a special category.

A percentage distribution of the types of programs attended by the children is as follows:

- Residential Schools for the Deaf . . . . . 21.9%
- Day Schools for the Deaf . . . . . 18.2%
- Classes for the Hearing Impaired . . . . . 49.3%
- Schools for the Multiply Handicapped . . . . . 1.0%
- Speech and Hearing Clinics . . . . . 8.0%
- Other . . . . . 1.7%

Speech and Hearing Clinics are included by the Survey as an educational program when the Speech

and Hearing Clinics offer an ongoing educational program that students attend on a regular basis, if only for one or two hours per week. Speech and Hearing Clinics that provided speech therapy classes to students on an irregular basis are not considered as educational programs for the purposes of the Survey.

Almost 50 percent of the students were enrolled in Classes for the Hearing Impaired and an additional 40 percent of the preschool hearing impaired children were enrolled in either Residential Schools (22 percent) or Day Schools (18 percent) during the 1969-70 school year.

Table 2 also presents the detailed age distribution according to the type of program the student attended. A percentage distribution by age according to type of program is shown in Table G. As can be noted in this table, for each age category the largest percentage of students were enrolled in Classes for the Hearing Impaired. However, it should be pointed out that for children under three years of age, the proportion of students that attended Classes for the Hearing Impaired (38 percent) was almost the same as the proportion that attended Speech and Hearing Clinics (37 percent).

The frequency distribution of better ear averages according to the type of program attended is also shown in Table 2. A percentage distribution summarizing some of these data is contained in Table H. While almost 43 percent of the students' records were lacking the data necessary to compute a better ear average, it can be seen that a relatively larger

percentage of students attending Residential Schools had hearing threshold levels of 85 decibels and above as compared to students enrolled in the other types of programs.

#### Type of Training Session

In addition to determining the type of educational program in which preschool children were enrolled, the Survey obtained information about the type of training session in which the child was seen, i.e., was the child seen individually or in a group session or in both an individual and group session.

Table 3 shows the number of students by type of program and type of training session in which the student was enrolled. The non-response rate for type of training session and hours per week was 12.5 percent or 796 students.

This table indicates that of the children for whom the type of training session was reported, 371 students or 7 percent were seen on an individual basis and 1,658 (30 percent) of the children were seen in a group-type training session. Almost two-thirds (64 percent) of the children received their educational instruction in both an individual and group session. For the 3,553 children who received both individual and group training, the Survey did not ascertain what proportion of time the student spent in individual training sessions and in group sessions.

Table I gives the percentage distribution for the types of training session the student attended in each

TABLE G: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by age, according to type of program attended: United States, 1969-70 school year

Age	Type of Program						
	All Programs	Residential Schools for the Deaf	Day Schools for the Deaf	Classes for the Hearing Impaired	Schools for the Multiply Handicapped	Speech and Hearing Clinics	Other
All Ages	100.0	21.9	18.2	49.3	1.0	8.0	1.7
Under 3 years	100.0	7.1	15.5	37.8	1.2	36.9	1.5
3 years - under 4 years	100.0	9.4	17.5	56.9	1.1	13.3	1.7
4 years - under 5 years	100.0	19.4	14.9	57.5	.8	7.0	.5
5 years - under 6 years	100.0	27.1	20.4	44.5	.9	4.7	2.3

TABLE H: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by hearing threshold levels, according to type of program attended: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO) <sup>1</sup>	Type of Program						
	All Programs	Residential Schools for the Deaf	Day Schools for the Deaf	Classes for the Hearing Impaired	Schools for the Multiply Handicapped	Speech and Hearing Clinics	Other
<u>All Hearing Levels</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Under 45dB	2.0	.4	2.2	1.6	—	3.5	26.4
45 - 54dB	2.5	.6	1.6	3.5	—	2.2	10.4
55 - 64dB	3.8	1.6	3.3	4.5	3.4	6.5	5.7
65 - 74dB	7.3	5.6	5.9	8.1	5.2	9.6	11.3
75 - 84dB	10.0	8.4	10.4	10.4	5.2	11.7	10.4
85dB & above	31.6	43.8	34.1	27.6	13.8	24.3	9.4
Data not available	42.7	39.7	42.5	44.3	72.4	42.3	26.4

<sup>1</sup>Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

TABLE I: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by type of program, according to type of training session: United States, 1969-70 school year

Type of Program	Type of Training Session			
	All Types <sup>1</sup>	Individual Training Only	Group Training Only	Individual and Group Training
<u>All Programs</u>	<u>100.0</u>	<u>6.6</u>	<u>29.7</u>	<u>63.7</u>
Residential schools for the deaf	100.0	2.0	23.4	74.6
Day schools for the deaf	100.0	2.0	47.5	50.5
Classes for the hearing impaired	100.0	4.5	24.4	71.2
Schools for the multiply handicapped	100.0	8.8	58.8	32.4
Speech & hearing clinics	100.0	33.0	36.1	30.9
Other	100.0	50.6	24.7	24.7

<sup>1</sup>Omitted from the computation are 796 students for whom data on type of training session and number of hours of training were not reported.

type of educational program. It may be seen that in Residential and Day Schools for the Deaf very few children received individual training. In Residential programs about 25 percent of the children received group training only, and a little over 70 percent received both individual and group training. In Day Schools for the Deaf very few received individual training; about 48 percent received group training only and about 50 percent received both individual and group training. Forty-two percent of the 371 students who had individual training only were enrolled in educational programs conducted by Speech and Hearing Clinics. Table I shows that the percentage of students enrolled in these Clinics is almost equally divided between the three types of training sessions.

#### Number of Hours of Training Per Week

Table 4 gives in detail the number of students by type of program according to the number of hours of training that the student received weekly. Omitted from the data for this particular table are the 371 students who were enrolled in individual training sessions. Of these 371 students, 240 or 65 percent were receiving one hour or less of individual training per week. An additional 73 students received two hours per week of training. For these 371 students the average number of hours of training per week which they received was one and one-half hours.

Table 4 shows that 2,477 students received 16 hours or more of weekly educational training. From information available in the basic records it is known that 2,074 of these students received 25 hours or more of training per week. Children who attended school less than 16 hours per week could be considered to be going to school for a half day, while students who attended 16 hours and over could be considered full-time students. Thus, the 2,477 children who received 16 hours or more of weekly training are treated in this discussion as full-time preschool students.

Percentage distributions from the data in Table 4 are shown in text Table J. Excluded from the table are 796 students for whom the hours of training were not reported and 371 students referred to earlier who received individual training only. It may be noted that almost half (47.5 percent) attended school 16 hours or more a week (full-time students). In Residential Schools the proportion attending full-time was about 90 percent. In Day Schools a little less

than half (47.7 percent) attended full-time; in Day Class programs about 35 percent attended full-time, while in Speech and Hearing Clinics less than 9 percent attended full-time.

Detailed Table 5 shows the number of students by age and hearing threshold levels according to the number of hours of training per week. For students under three years of age, 87 of the total 165 students for whom the data were reported attended classes less than 10 hours per week. For the older children, exclusive of those for whom the data were not reported, the following percentages can be derived from Table 5. For three year olds, 19.2 percent attended less than 10 hours per week and 22.3 percent attended 16 hours or more (full-time); for four year olds, 7.1 percent attended less than 10 hours per week and 40.9 percent attended 16 hours or more; and for five year olds, 6.3 percent attended less than 10 hours, while 58.5 percent attended 16 hours or more. As might be surmised, the younger children generally had less hours of training per week.

Table K summarizes information from Table 5 according to hearing threshold levels. Again, excluded from the percentage distribution in this table are the 371 students who received individual training only and 796 students for whom hours of training were not reported. As might be expected, the percentages show that the more severe the hearing loss the more likely that the students were receiving more hours of training. The percentage of students who attended class full-time (16 or more hours per week) range from about 16 percent for students with threshold levels under 45 decibels to about 57 percent for students with threshold levels at 85 decibels and above.

TABLE J: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by type of program, according to number of hours of training per week: United States, 1969-70 school year

Type of Program	All Students <sup>1</sup>	Number of Hours of Training Per Week			
		Less Than 10 Hours	10-12 Hours	13-15 Hours	16 Hours or More
<u>All Programs</u>	<u>100.0</u>	<u>9.4</u>	<u>17.5</u>	<u>25.6</u>	<u>47.5</u>
Residential schools for the deaf	100.0	2.9	3.8	2.5	90.8
Day schools for the deaf	100.0	4.7	21.1	26.4	47.7
Classes for the hearing impaired	100.0	7.7	21.3	35.8	35.2
Schools for the multiply handicapped	100.0	32.3	6.5	58.1	3.2
Speech & hearing clinics	100.0	58.3	21.3	11.9	8.5
Other	100.0	15.0	17.5	42.5	25.0

<sup>1</sup>Omitted from the computation are 796 students for whom data on type of training session and number of hours of training were not reported. Also excludes 371 students who were receiving individual training only. On the average these 371 students received about 1½ hours of training per week.

TABLE K: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by hearing threshold levels, according to number of hours of training per week: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO) <sup>1</sup>	All Students <sup>2</sup>	Number of Hours of Training Per Week			
		Less Than 10 Hours	10-12 Hours	13-15 Hours	16 Hours and Over
<u>All Hearing Levels</u>	<u>100.0</u>	<u>9.4</u>	<u>17.5</u>	<u>25.6</u>	<u>47.5</u>
Under 45dB	100.0	20.9	29.1	33.7	16.3
45 - 64dB	100.0	11.2	26.7	29.4	32.3
65 - 84dB	100.0	8.7	17.3	30.3	43.8
85dB & above	100.0	7.4	14.8	20.9	56.8
Data not available	100.0	10.5	17.9	26.5	45.2

<sup>1</sup>Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup>Omitted from the computation are 796 students for whom data on type of training session and number of hours of training were not reported. Also excludes 371 students who were receiving individual training only. On the average these 371 students received about 1½ hours of training per week.

### Size of Program

Detailed Table 6 presents the frequency distribution by age and hearing threshold levels according to the "Size of Program" attended by preschool hearing impaired students. The size of the program refers to the total number of hearing impaired students of all ages enrolled in each participating program. Information on this variable was available for all students.

Table L indicates the percentage distribution by age of students in the various size programs. These percentages indicate that generally the younger

students are attending educational programs that have a smaller enrollment of students relative to the older preschool-age children, e.g., 53 percent of the students under three years of age were in programs with total enrollment of under 41 students, whereas only 21 percent of the five year olds were in programs of that size.

As indicated in text Table M, students with better ear averages of 85 dB and above constituted the largest proportion of students in all of the programs. This percentage of students with more severe losses, however, was higher in the size categories of "201-300 students" and "301 students or more."

TABLE L: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by hearing threshold levels, according to number of hours of training per week: United States, 1969-70 school year

Size of Program <sup>1</sup>	Age				
	All Ages Under Six	Under 3 Years	3 Years-Under 4 Years	4 Years-Under 5 Years	5 Years-Under 6 Years
All Programs	100.0	100.0	100.0	100.0	100.0
Under 21 students	11.8	29.2	19.7	10.8	9.1
21 to 40 students	14.0	23.8	18.9	15.0	11.5
41 to 60 students	10.7	16.7	15.2	12.8	8.1
61 to 100 students	12.8	6.8	16.2	15.7	11.1
101 to 200 students	21.7	6.8	16.2	23.3	23.4
201 to 300 students	14.0	4.5	7.7	11.2	17.7
301 students or more	15.1	12.2	6.2	11.3	19.1

<sup>1</sup>Size of program refers to the total number of hearing impaired students, of all ages, that were reported as enrolled in the participating program.

TABLE M: Number and percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by size of program, according to hearing threshold levels: United States, 1969-70 school year

Size of Program <sup>2</sup>	Better Ear Averages in Decibels (ISO) <sup>1</sup>									
	All Hearing Levels <sup>3</sup>		Under 45dB		45-64db		65-84dB		85dB & Above	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Programs	3,652	100.0	128	3.5	402	11.0	1,105	30.3	2,017	55.2
Under 21 students	413	100.0	18	4.4	70	16.9	146	35.4	179	43.3
21 to 40 students	480	100.0	19	4.0	59	12.3	148	30.8	254	52.9
41 to 60 students	403	100.0	17	4.2	54	13.4	131	32.5	201	49.9
61 to 100 students	437	100.0	13	3.0	63	14.4	135	30.9	226	51.7
101 to 200 students	805	100.0	17	2.1	85	10.6	264	32.8	439	54.5
201 to 300 students	536	100.0	27	5.0	41	7.6	139	25.9	329	61.4
301 students or more	578	100.0	17	2.9	30	5.2	142	24.6	389	67.3

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Size of program refers to the total number of hearing impaired students, of all ages, that were reported as enrolled in the participating program.

<sup>3</sup> Omitted from the computation are 2,726 students for whom data on better ear averages were not reported or the data were not usable.

### Age Started Education

The reporting form used for the Survey obtained information on the age of the student when he first started his education. Table 7 indicates the hearing threshold level and the chronological age of the students, according to the age the student began his special educational training. For this variable, information was not available for 1,233 of the students under six years of age (19 percent of the total, 6,378 students).

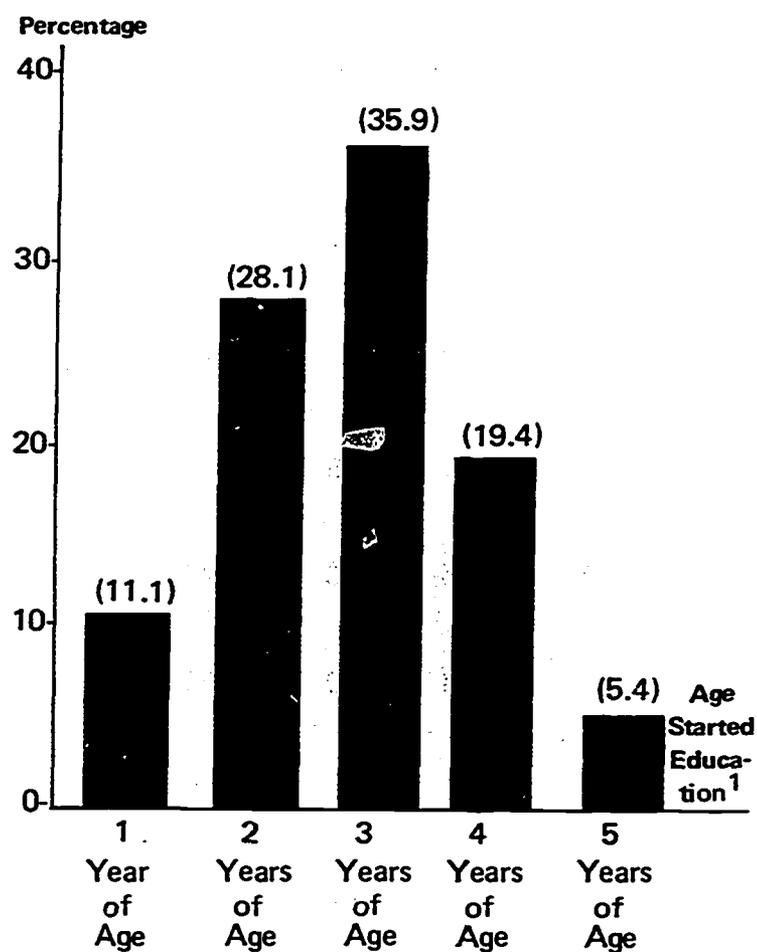
When the 1,233 students for whom "age started education" was not available are omitted from the computation, the percentage distribution for the remaining students is as follows:

Started Education 1 Year of Age ..... 11.1%  
 Started Education 2 Years of Age ..... 28.1%  
 Started Education 3 Years of Age ..... 35.9%  
 Started Education 4 Years of Age ..... 19.4%  
 Started Education 5 Years of Age ..... 5.4%

It is worth noting that almost 40 percent of these preschool students began their education prior to age three (see Chart 2).

Summarized in Table N is the number of students by the student's chronological age according to the age when he began his education. Highlighted in this table is the fact that the majority of these students began their education prior to the 1969-70 school year. For example, only 278 of the 3,478 five year olds (8 percent) were in their first year of school. Similarly only 269 of the 1,865 four year olds (14 percent) and 217 of 699 three year olds (31 percent) were attending school for the first time.

**CHART 2: Percentage distribution of students<sup>1</sup> under six years of age enrolled in participating special educational programs for the hearing impaired by age started education**



<sup>1</sup>Omitted from the computation are 1,233 students for whom data on age started education were not available.

**TABLE N: Number of students under six years of age enrolled in participating special educational programs for the hearing impaired by age, according to age started education: United States, 1969-70 school year**

Chronological Age	Total Number of Students	Age Started Education					Data Not Available
		1 Year of Age	2 Years of Age	3 Years of Age	4 Years of Age	5 Years of Age	
All Ages	6,378	573	1,449	1,848	997	278	1,233
Under 3 years	336	150	89	—	—	—	97
3 years-under 4 years	699	92	265	217	—	—	125
4 years-under 5 years	1,865	139	476	639	269	—	342
5 years-under 6 years	3,478	192	619	992	728	278	669

Table O shows the percent distribution by hearing threshold level according to the age of the student when he began his education. It can be seen from this table that children who began their education at an early age tended to have more severe hearing losses than children who started their education at a later age. For example, 66 percent of the children who started at one year of age and for whom a better ear average could be computed had a loss of 85 dB and above, whereas only 37 percent of the children who started their special educational training at five years of age had a hearing loss of 85 dB and above.

#### Age at Onset

Table 8 presents data for age and hearing threshold levels according to age at onset of the hearing loss. "Age at onset" as used in this report is defined as the age at last birthday prior to the onset of hearing loss. Therefore, a preschool student whose age at onset was 2 years, 4 months is included in the category "Onset 1 Year, Less than 3 Years".

If the 753 students or 11.8 percent for whom the age at onset of the hearing loss was not reported are excluded from the tabulations, the distribution

TABLE O: Percent distribution of students under six years of age enrolled in special educational programs for the hearing impaired by hearing threshold levels, according to age started education: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO) <sup>1</sup>	All Students <sup>2</sup>	Age Started Education					Data Not Available
		1 Year of Age	2 Years of Age	3 Years of Age	4 Years of Age	5 Years of Age	
<u>All Hearing Levels</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Under 45dB	3.5	2.1	2.5	2.5	3.2	13.6	5.0
45 - 54dB	4.4	3.3	2.8	3.3	7.5	7.7	5.1
55 - 64dB	6.7	3.8	4.8	5.8	11.4	11.2	6.5
65 - 74dB	12.7	8.0	10.3	14.0	15.0	13.0	14.4
75 - 84dB	17.5	16.6	15.4	19.9	18.0	17.2	16.4
85dB & above	55.2	66.3	64.2	54.6	44.8	37.3	52.6

<sup>1</sup>Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup>Omitted from the computation are 2,726 students for whom data on better ear averages were not reported or the data were not usable.

would be as follows:

Onset at Birth ..... 89.9%  
 Onset Under 1 Year ..... 4.2%  
 Onset 1 Year, Less than 3 Years ..... 5.0%  
 Onset 3 Years & Over ..... .8%

Thus, age at onset of hearing loss was reported as under 1 year or at birth for over 94 percent of these

students. As seen in Table P, the age at onset was similar for these students regardless of chronological age at the time of the Survey.

Table Q shows that while 56 percent of the students with onsets at birth had an 85 dB loss and above, only 38 percent of those with onsets at three years and over had losses of 85 db and above.

TABLE P: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by age, according to age at onset of hearing loss: United States, 1969-70 school year

Chronological Age	Age at Onset of Hearing Loss					Data Not Available
	All Onsets	At Birth	Under 1 Year	1 Year Less Than 3 Years	3 Years & Over	
<u>All Ages</u>	<u>100.0</u>	<u>79.3</u>	<u>3.7</u>	<u>4.4</u>	<u>.7</u>	<u>11.8</u>
Under 3 years	100.0	77.7	6.0	6.5	—	9.8
3 years-under 4 years	100.0	75.5	4.3	7.3	.3	12.6
4 years-under 5 years	100.0	79.4	3.8	4.0	.6	12.2
5 years-under 6 years	100.0	80.2	3.4	3.9	.9	11.6

TABLE Q: Percentage distribution of students under six years of age enrolled in participating special educational programs for the hearing impaired by hearing threshold levels, according to age at onset: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO) <sup>1</sup>	Age at Onset of Hearing Loss					
	All Onsets	At Birth	Under 1 Year	1 Year Less Than 3 Years	3 Years & Over	Data Not Available
All Hearing Levels <sup>2</sup>	100.0	100.0	100.0	100.0	100.0	100.0
Under 45dB	3.5	2.5	1.7	8.1	12.5	8.8
45 - 64dB	11.0	11.0	10.7	8.7	20.8	11.1
65 - 84 dB	30.3	30.5	20.7	29.5	29.2	31.7
85dB & above	55.2	55.9	66.9	53.7	37.5	48.4

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Omitted from the computation are 2,726 students for whom data on better ear averages were not reported or the data were not usable.

#### Parent Training

The data collection form used in the Survey (Appendix II) contained two questions relating to the training of parents of hearing impaired students. The Survey asked if the parents of students were receiving any special training related to their child's hearing impairment, and if so whether or not the training was obtained through a correspondence course, a special parent program, or both. The questions asked did not ascertain whether one or both parents were receiving the training.

Tables 9 and 10 show the distribution of the variable "parent training" with age at onset of hearing loss and hearing threshold levels, respectively. The non-response rate for the "parent training" question was 25 percent of the total students. As indicated in both of these tables, the parent or parents of 2,451 students were receiving some form of parent training. There were 2,361 students whose parents were not receiving any parent training.

With respect to the 2,451 students whose parents received some parental training relating to their child's hearing impairment, the following is of note:

Total Students  
Whose Parents Received Training . . . . 2,451  
 Parents in Special Parent Program Only . . 1,935  
 Parents in Both Special Parent Program  
 And Correspondence Course . . . . . 303  
 Parents in Correspondence Course Only . . . 213

Thus, almost 79 percent of those who were receiving training were found to be receiving training in a special parent program only, while approximately 9 percent were receiving parental training only through some type of correspondence course. The other 12 percent were found to be enrolled in both types of programs for training related to their child's hearing impairment.

Table 9 shows the number distribution for age at onset of hearing loss and parent training. This table demonstrates that at each age of onset the number of students whose parents received either some form of parental training or none was almost the same.

Table 10 shows the distribution of preschool students enrolled in participating special educational programs by hearing threshold levels and parent training. When the 1,566 students for whom information on parental training was unknown or not reported are excluded from the computation, Table R shows that the parents of 40 percent of the students received parental training when their child had a loss of under 45 dB. The parents of almost 52 percent of the students were receiving some parental training when their child had a threshold level of 65 dB and above.

TABLE R: Number and percentage of students under six years of age enrolled in participating special educational programs for the hearing impaired by hearing threshold levels, according to parent training: United States, 1969-70 school year

Better Ear Averages in Decibels(ISO) <sup>1</sup>	Students <sup>2</sup>		Some Parental Training		No Parental Training	
	Number	Percent	Number	Percent	Number	Percent
All Hearing Levels	4,812	100.0	2,451	50.9	2,361	49.1
Under 45dB	91	100.0	36	39.6	55	60.4
54-64dB	303	100.0	147	48.5	156	51.5
65-84dB	860	100.0	450	52.3	410	47.7
85dB & above	1,570	100.0	819	52.2	751	47.8
Data Not available	1,988	100.0	999	50.3	989	49.7

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Omitted from the computation are 1,566 students for whom data on parental training were not available.

## SUMMARY

Selected demographic characteristics of approximately 6,400 preschool hearing impaired students have been presented. The sources of the data along with the qualifications and limitations of these data have been presented and explained. Although these preschool students do not represent all preschool students, the data presented in this report can be considered to be representative of hearing impaired students under six years of age. An important limitation of these data to be considered is the non-response rate on some of the variables.

The highlights of this report show the following about hearing impaired students under the age of six participating in the Annual Survey for the 1969-70 school year:

1. Five year old students accounted for approximately 55 percent of all preschool students.
2. On those students for whom a better ear average was obtained, 55 percent had a hearing threshold level of 85 dB and above.
3. Almost 50 percent of preschool students were enrolled in Classes for the Hearing Impaired and 40 percent were attending Residential or Day Schools for the Deaf.
4. Almost one-half of the students for whom data on hours of training were reported attended school 16 hours or more a week. By the Survey

definition, these students are considered as full-time students.

5. Over 50 percent of the students under three years of age attended programs having enrollments under 41 students, while only 21 percent of the five year old children were in the same size program.
6. It is to be noted that when the age the child started his education was reported, almost 40 percent of the students began their education prior to age three.
7. Age at onset of hearing loss was reported to the Survey as occurring under 1 year of age or at birth for 94 percent of the students.
8. Where the data were reported, fifty percent of the students' parents were receiving some training related to their children's hearing loss. Of these students' parents, 9 percent were enrolled in correspondence courses, 79 percent were receiving training in a special parent program and 12 percent were in both types of programs.

Increasing coverage and more complete information on preschool hearing impaired students continue to be sought by the Annual Survey. This report and others like it seek to provide an insight and impetus for more intensive studies among administrators, teachers and researchers so that they can continue to provide a variety of professional services for the hearing impaired child.

## LIST OF DETAILED TABLES

- TABLE 1: Number of Students Under Six Years of Age Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels and Sex, According to Age: United States, 1969-70 School Year.
- TABLE 2: Number of Students Under Six Years of Age Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels and Age, According to Type of Program: United States, 1969-70 School Year.
- TABLE 3: Number of Students Under Six Years of Age Enrolled in Participating Special Educational Programs for the Hearing Impaired by Type of Program, According to the Type of Training Session: United States, 1969-70 School Year.
- TABLE 4: Number of Students Under Six Years of Age Enrolled In Participating Special Educational Programs for the Hearing Impaired by Type of Program, According to Number of Hours of Training Per Week: United States, 1969-70 School Year.
- TABLE 5: Number of Students Under Six Years of Age Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels and Age, According to Number of Hours of Training Per Week: United States, 1969-70 School Year.
- TABLE 6: Number of Students Under Six Years of Age Enrolled In Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels and Age, According to Size of Program: United States, 1969-70 School Year.
- TABLE 7: Number of Students Under Six Years of Age Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels and Age, According to Age Started Education: United States, 1969-70 School Year.
- TABLE 8: Number of Students Under Six Years of Age Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels and Age, According to Age at Onset of Hearing Loss: United States, 1969-70 School Year.
- TABLE 9: Number of Students Under Six Years of Age Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age at Onset of Hearing Loss, According to Parent Training: United States, 1969-70 School Year.
- TABLE 10: Number of Students Under Six Years of Age Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels, According to Parent Training: United States, 1969-70 School Year.

TABLE 1: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS AND SEX, ACCORDING TO AGE: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Sex	Total Number of Students	Age of Students <sup>2</sup>			
		Under 3 Years	3 Years – Under 4 Years	4 Years – Under 5 Years	5 Years – Under 6 Years
<b>Both Sexes- All Hearing Levels</b>	<b>6,378</b>	<b>336</b>	<b>699</b>	<b>1,865</b>	<b>3,478</b>
<b>Under 30dB</b>	<b>44</b>	<b>1</b>	<b>7</b>	<b>4</b>	<b>32</b>
<b>30-44dB</b>	<b>84</b>	<b>4</b>	<b>16</b>	<b>17</b>	<b>47</b>
<b>45-54dB</b>	<b>159</b>	<b>11</b>	<b>13</b>	<b>45</b>	<b>90</b>
<b>55-64dB</b>	<b>243</b>	<b>9</b>	<b>25</b>	<b>75</b>	<b>134</b>
<b>65-74dB</b>	<b>465</b>	<b>19</b>	<b>44</b>	<b>125</b>	<b>277</b>
<b>75-84dB</b>	<b>640</b>	<b>19</b>	<b>65</b>	<b>198</b>	<b>358</b>
<b>85-94dB</b>	<b>693</b>	<b>26</b>	<b>82</b>	<b>169</b>	<b>416</b>
<b>95dB and Above</b>	<b>1,324</b>	<b>37</b>	<b>100</b>	<b>364</b>	<b>823</b>
<b>Unable to Compute</b>	<b>2,180</b>	<b>163</b>	<b>277</b>	<b>685</b>	<b>1,055</b>
<b>Data Not Reported</b>	<b>546</b>	<b>47</b>	<b>70</b>	<b>183</b>	<b>246</b>
<b>Females- All Hearing Levels</b>	<b>3,096</b>	<b>162</b>	<b>329</b>	<b>914</b>	<b>1,691</b>
<b>Under 30dB</b>	<b>16</b>	<b>1</b>	<b>3</b>	<b>-</b>	<b>12</b>
<b>30-44dB</b>	<b>37</b>	<b>1</b>	<b>6</b>	<b>10</b>	<b>20</b>
<b>45-54dB</b>	<b>74</b>	<b>5</b>	<b>7</b>	<b>21</b>	<b>41</b>
<b>55-64dB</b>	<b>112</b>	<b>3</b>	<b>10</b>	<b>36</b>	<b>63</b>
<b>65-74dB</b>	<b>220</b>	<b>10</b>	<b>18</b>	<b>52</b>	<b>140</b>
<b>75-84dB</b>	<b>318</b>	<b>10</b>	<b>34</b>	<b>98</b>	<b>176</b>
<b>85-94dB</b>	<b>348</b>	<b>7</b>	<b>34</b>	<b>92</b>	<b>215</b>
<b>95dB and Above</b>	<b>629</b>	<b>15</b>	<b>42</b>	<b>187</b>	<b>385</b>
<b>Unable to Compute</b>	<b>1,089</b>	<b>86</b>	<b>139</b>	<b>337</b>	<b>527</b>
<b>Data Not Reported</b>	<b>253</b>	<b>24</b>	<b>36</b>	<b>81</b>	<b>112</b>
<b>Males- All Hearing Levels</b>	<b>3,282</b>	<b>174</b>	<b>370</b>	<b>951</b>	<b>1,787</b>
<b>Under 30dB</b>	<b>28</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>20</b>
<b>30-44dB</b>	<b>47</b>	<b>3</b>	<b>10</b>	<b>7</b>	<b>27</b>
<b>45-54dB</b>	<b>85</b>	<b>6</b>	<b>6</b>	<b>24</b>	<b>49</b>
<b>55-64dB</b>	<b>131</b>	<b>6</b>	<b>15</b>	<b>39</b>	<b>71</b>
<b>65-74dB</b>	<b>245</b>	<b>9</b>	<b>26</b>	<b>73</b>	<b>137</b>
<b>75-84dB</b>	<b>322</b>	<b>9</b>	<b>31</b>	<b>100</b>	<b>182</b>
<b>85-94dB</b>	<b>345</b>	<b>19</b>	<b>48</b>	<b>77</b>	<b>201</b>
<b>95dB and Above</b>	<b>695</b>	<b>22</b>	<b>58</b>	<b>177</b>	<b>438</b>
<b>Unable to Compute</b>	<b>1,091</b>	<b>77</b>	<b>138</b>	<b>348</b>	<b>528</b>
<b>Data Not Reported</b>	<b>293</b>	<b>23</b>	<b>34</b>	<b>102</b>	<b>134</b>

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Age of student as of December 31, 1969.

TABLE 2: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS AND AGE, ACCORDING TO TYPE OF PROGRAM: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Age <sup>2</sup>	Total Number of Students	Type of Program					
		Residential Schools for the Deaf	Day Schools for the Deaf	Classes for the Hearing Impaired	Schools for the Multiply Handi- capped	Speech and Hearing Clinics	Other
<b>All Ages-All Hearing Levels</b>	<b>6,378</b>	<b>1,396</b>	<b>1,161</b>	<b>3,146</b>	<b>58</b>	<b>511</b>	<b>106</b>
Under 45dB	128	5	26	51	--	18	28
45-54dB	159	9	18	110	--	11	11
55-64dB	243	22	38	142	2	33	6
65-74dB	465	78	69	254	3	49	12
75-84dB	540	117	121	328	3	60	11
85dB and Above	2,017	611	396	868	8	124	10
Data Not Available	2,726	554	493	1,393	42	216	28
<b>Under 3 Years- All Hearing Levels</b>	<b>336</b>	<b>24</b>	<b>52</b>	<b>127</b>	<b>4</b>	<b>124</b>	<b>5</b>
Under 45dB	5	--	--	3	--	2	--
45-54dB	11	1	--	9	--	--	1
55-64dB	9	2	--	3	1	3	--
65-74dB	19	--	6	5	--	8	--
75-84dB	19	2	1	7	--	9	--
85dB and Above	63	5	11	22	--	24	1
Data Not Available	210	14	34	78	3	78	3
<b>3 Years-Under 4 Years All Hearing Levels</b>	<b>699</b>	<b>66</b>	<b>122</b>	<b>398</b>	<b>8</b>	<b>93</b>	<b>12</b>
Under 45dB	23	--	6	9	--	6	2
45-54dB	13	--	1	12	--	--	--
55-64dB	25	2	2	10	1	9	1
65-74dB	44	2	5	26	--	10	1
75-84dB	65	3	14	38	1	9	--
85dB and Above	182	19	43	98	1	20	1
Data Not Available	347	40	51	205	5	39	7
<b>4 Years-Under 5 Years All Hearing Levels</b>	<b>1,865</b>	<b>362</b>	<b>277</b>	<b>1,072</b>	<b>14</b>	<b>131</b>	<b>9</b>
Under 45dB	21	--	4	11	--	5	1
45-54dB	45	2	5	33	--	4	1
55-64dB	75	4	13	51	--	7	--
65-74dB	125	16	15	75	--	18	1
75-84dB	198	27	37	113	--	20	1
85dB and Above	533	122	84	293	1	32	1
Data Not Available	868	191	119	496	13	45	4
<b>5 Years-Under 6 Years All Hearing Levels</b>	<b>3,478</b>	<b>944</b>	<b>710</b>	<b>1,549</b>	<b>32</b>	<b>163</b>	<b>80</b>
Under 45dB	79	5	16	28	--	5	25
45-54dB	89	6	12	56	--	7	9
55-64dB	134	14	23	78	--	14	5
65-74dB	277	60	43	148	3	13	10
75-84dB	358	85	69	170	2	22	10
85dB and Above	1,239	465	258	455	6	48	7
Data Not Available	1,301	309	289	614	21	54	14

<sup>1</sup>Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup>Age of student as of December 31, 1969.

TABLE 3: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY TYPE OF PROGRAM, ACCORDING TO TYPE OF TRAINING SESSION: UNITED STATES, 1969-70 SCHOOL YEAR.

Type of Program	Total Number of Students	Type of Training Session			Data Not Available
		Individual Training Only	Group Training Only	Both Individual & Group Training	
All Programs	6,378	371	1,658	3,553	796
Residential Schools for the Deaf	1,396	23	263	840	270
Day Schools for the Deaf	1,161	21	495	527	118
Classes for the Hearing Impaired	3,146	126	688	2,008	324
Schools for the Multiply Handicapped	58	3	20	11	24
Speech and Hearing Clinics	511	157	172	147	35
Other	106	41	20	20	25

**TABLE 4: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY TYPE OF PROGRAM, ACCORDING TO NUMBER OF HOURS OF TRAINING PER WEEK: UNITED STATES, 1969-70 SCHOOL YEAR.**

Type of Program	Total Number of Students <sup>1</sup>	Number of Hours of Training Per Week				
		Less Than 10 Hours	10-12 Hours	13-15 Hours	16 Hours or More	Data Not Available
<b>All Programs</b>	<b>6,007</b>	<b>489</b>	<b>910</b>	<b>1,335</b>	<b>2,477</b>	<b>796</b>
<b>Residential Schools for the Deaf</b>	<b>1,373</b>	<b>32</b>	<b>42</b>	<b>28</b>	<b>1,001</b>	<b>270</b>
<b>Day Schools for the Deaf</b>	<b>1,140</b>	<b>48</b>	<b>216</b>	<b>270</b>	<b>488</b>	<b>118</b>
<b>Classes for the Hearing Impaired</b>	<b>3,020</b>	<b>207</b>	<b>575</b>	<b>964</b>	<b>950</b>	<b>324</b>
<b>Schools for the Multiply Handicapped</b>	<b>55</b>	<b>10</b>	<b>2</b>	<b>18</b>	<b>1</b>	<b>24</b>
<b>Speech and Hearing Clinics</b>	<b>354</b>	<b>186</b>	<b>68</b>	<b>38</b>	<b>27</b>	<b>35</b>
<b>Other</b>	<b>65</b>	<b>6</b>	<b>7</b>	<b>17</b>	<b>10</b>	<b>25</b>

<sup>1</sup> Does not include 371 students who were receiving individual training only. On the average these students received about 1½ hours of training per week.

TABLE 5: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS AND AGE, ACCORDING TO NUMBER OF HOURS OF TRAINING PER WEEK: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Age <sup>2</sup>	Total Number of Students <sup>3</sup>	Number of Hours of Training Per Week				
		Less Than 10 Hours	10-12 Hours	13-15 Hours	16 Hours or More	Data Not Available
<b>All Ages-All Hearing Levels</b>	<b>6,007</b>	<b>489</b>	<b>910</b>	<b>1,335</b>	<b>2,477</b>	<b>796</b>
Under 45dB	111	18	25	29	14	25
45-64dB	361	34	81	89	99	58
65-84dB	1,052	80	159	279	403	131
85dB and Above	1,939	127	253	357	969	233
Data Not Available	2,544	230	392	581	992	349
<b>Under 3 Years - All Hearing Levels</b>	<b>190</b>	<b>87</b>	<b>37</b>	<b>32</b>	<b>9</b>	<b>25</b>
Under 45dB	3	-	2	-	-	1
45-64dB	11	3	4	2	1	1
65-84dB	27	10	6	5	2	4
85dB and Above	34	13	6	8	1	6
Data Not Available	115	61	19	17	5	13
<b>3 Years-Under 4 Years All Hearing Levels</b>	<b>628</b>	<b>107</b>	<b>149</b>	<b>176</b>	<b>124</b>	<b>72</b>
Under 45dB	17	6	6	-	1	4
45-64dB	31	6	9	8	2	6
65-84dB	96	16	24	23	17	16
85dB and Above	171	31	40	47	36	17
Data Not Available	313	48	70	98	68	29
<b>4 Years-Under 5 Years All Hearing Levels</b>	<b>1,795</b>	<b>113</b>	<b>327</b>	<b>503</b>	<b>646</b>	<b>206</b>
Under 45dB	19	4	5	5	3	2
45-64dB	109	6	34	36	22	11
65-84dB	312	23	65	100	92	32
85dB and Above	516	31	87	130	218	50
Data Not Available	839	49	136	232	311	111
<b>5 Years-Under 6 Years All Hearing Levels</b>	<b>3,394</b>	<b>182</b>	<b>397</b>	<b>624</b>	<b>1,698</b>	<b>493</b>
Under 45dB	72	8	12	24	10	18
45-64dB	210	19	34	43	74	40
65-84dB	617	31	64	151	292	79
85dB and Above	1,218	52	120	172	714	160
Data Not Available	1,277	72	167	234	608	196

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Age of student as of December 31, 1969.

<sup>3</sup> Does not include 371 students who were receiving individual training only. On the average these students received about 1½ hours of training per week.

TABLE 6: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS AND AGE, ACCORDING TO SIZE OF PROGRAM: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Age <sup>2</sup>	Total Number of Students	Size of Program <sup>3</sup>									
		10 Students or Less	11 to 20 Students	21 to 40 Students	41 to 60 Students	61 to 100 Students	101 to 200 Students	201 to 300 Students	301 to 400 Students	401 to 600 Students	601 Students or More
<b>All Ages-All Hearing Levels</b>	6,378	196	559	891	681	814	1,385	892	345	423	192
Under 45dB	128	5	13	19	17	13	17	27	5	5	7
45-54dB	159	4	18	27	25	28	32	15	6	3	1
55-64dB	243	15	33	32	29	35	53	26	4	8	8
65-74dB	465	15	48	57	59	63	112	56	14	29	12
75-84dB	640	25	58	91	72	72	152	83	18	46	23
85dB and Above	2,017	44	135	254	201	226	439	329	157	169	63
Data Not Available	2,726	88	254	411	278	377	580	356	141	163	78
<b>Under 3 Years- All Hearing Levels</b>	336	32	66	80	56	23	23	15	10	28	3
Under 45dB	5	-	1	-	3	-	-	-	-	1	-
45-54dB	11	-	1	-	8	1	1	-	-	-	-
55-64dB	9	-	4	2	1	1	1	-	-	-	-
65-74dB	19	1	3	6	3	2	2	1	1	-	-
75-84dB	19	2	3	5	5	-	-	2	1	1	-
85dB and Above	63	6	14	17	9	2	6	4	1	4	-
Data Not Available	210	23	40	50	27	17	13	8	7	22	3
<b>3 Years-Under 4 Years All Hearing Levels</b>	699	39	99	132	106	113	113	54	21	18	4
Under 45dB	23	-	2	8	6	1	2	3	-	-	1
45-54dB	13	1	1	4	2	2	2	1	-	-	-
55-64dB	25	2	7	5	2	1	6	-	1	1	-
65-74dB	44	1	7	8	12	5	6	3	-	1	1
75-84dB	65	3	12	7	13	10	14	4	-	2	-
85dB and Above	182	10	27	28	21	28	30	22	12	4	-
Data Not Available	347	22	43	72	50	66	53	21	8	10	2
<b>4 Years-Under 5 Years All Hearing Levels</b>	1,865	50	152	279	238	292	434	209	71	76	64
Under 45dB	21	3	3	2	5	2	2	3	-	-	1
45-54dB	45	2	4	8	11	6	9	4	-	1	-
55-64dB	75	1	7	12	15	17	14	5	1	2	1
65-74dB	125	5	15	17	21	19	28	13	1	2	4
75-84dB	198	8	19	31	27	27	47	21	7	5	6
85dB and Above	533	14	30	86	70	74	115	64	30	26	24
Data Not Available	868	17	74	123	89	147	219	99	32	40	28
<b>5 Years-Under 6 Years All Hearing Levels</b>	3,478	75	242	400	281	386	815	614	243	301	121
Under 45dB	79	2	7	9	3	10	13	21	5	4	5
45-54dB	90	1	12	15	4	19	20	10	6	2	1
55-64dB	134	12	15	13	11	16	32	21	2	5	7
65-74dB	277	8	23	26	23	37	76	39	12	26	7
75-84dB	358	12	24	48	27	35	91	56	10	38	17
85dB and Above	1,239	14	64	123	101	122	288	239	114	135	39
Data Not Available	1,301	26	97	166	112	147	295	228	94	91	45

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Age of student as of December 31, 1969.

<sup>3</sup> Size of Program refers to the total number of hearing impaired students, of all ages, that were reported as enrolled in the participating program.

TABLE 7: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS AND AGE, ACCORDING TO AGE STARTED EDUCATION: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Age <sup>2</sup>	Total Number of Students	Age Started Education					
		1 Year of Age	2 Years of Age	3 Years of Age	4 Years of Age	5 Years of Age	Data Not Available
<b>All Ages-All Hearing Levels</b>	<b>6,378</b>	<b>573</b>	<b>1,449</b>	<b>1,848</b>	<b>997</b>	<b>278</b>	<b>1,233</b>
Under 45dB	128	7	22	27	19	23	30
45-54dB	159	11	24	36	44	13	31
55-64dB	243	13	42	63	67	19	39
65-74dB	465	27	89	152	88	22	87
75-84dB	640	56	134	216	106	29	99
85dB and Above	2,017	224	557	593	263	63	317
Data Not Available	2,726	235	581	761	410	109	630
<b>Under 3 Years- All Hearing Levels</b>	<b>336</b>	<b>150</b>	<b>89</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>97</b>
Under 45dB	5	1	2	-	-	-	2
45-54dB	11	2	6	-	-	-	3
55-64dB	9	7	-	-	-	-	2
65-74dB	19	10	5	-	-	-	4
75-84dB	19	11	5	-	-	-	3
85dB and Above	63	35	14	-	-	-	14
Data Not Available	210	84	57	-	-	-	69
<b>3 Years-Under 4 Years All Hearing Levels</b>	<b>699</b>	<b>92</b>	<b>265</b>	<b>217</b>	<b>-</b>	<b>-</b>	<b>125</b>
Under 45dB	23	1	14	5	-	-	3
45-54dB	13	1	5	6	-	-	1
55-64dB	25	-	14	9	-	-	2
65-74dB	44	7	18	13	-	-	6
75-84dB	65	8	27	18	-	-	12
85dB and Above	182	33	77	51	-	-	21
Data Not Available	347	42	110	115	-	-	80
<b>4 Years-Under 5 Years All Hearing Levels</b>	<b>1,865</b>	<b>139</b>	<b>476</b>	<b>639</b>	<b>269</b>	<b>-</b>	<b>342</b>
Under 45dB	21	1	1	7	9	-	3
45-54dB	45	3	6	15	16	-	5
55-64dB	75	2	15	20	23	-	15
65-74dB	125	4	32	47	19	-	23
75-84dB	198	15	42	87	30	-	24
85dB and Above	533	60	177	170	52	-	74
Data Not Available	868	54	203	293	120	-	198
<b>5 Years-Under 6 Years All Hearing Levels</b>	<b>3,478</b>	<b>192</b>	<b>619</b>	<b>992</b>	<b>728</b>	<b>278</b>	<b>669</b>
Under 45dB	79	4	5	15	10	23	22
45-54dB	90	5	7	15	28	13	22
55-64dB	134	4	13	34	44	19	20
65-74dB	277	6	34	92	69	22	54
75-84dB	358	22	60	111	76	29	60
85dB and Above	1,239	96	289	372	211	63	208
Data Not Available	1,301	55	211	353	290	109	283

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Age of student as of December 31, 1969.

TABLE 8: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS AND AGE, ACCORDING TO AGE AT ONSET OF HEARING LOSS: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Age <sup>2</sup>	Total Number of Students	Age at Onset of Hearing Loss				
		At Birth	Under 1 Year	1 Year, Less Than 3 Years	3 Years And Over	Data Not Available
<b>All Ages-All Hearing Levels</b>	6,378	5,058	238	282	47	753
Under 45dB	128	75	2	12	3	36
45-64dB	402	326	13	13	5	45
65-84dB	1,105	900	25	44	7	129
85dB and Above	2,017	1,650	81	80	9	197
Data Not Available	2,726	2,107	117	133	23	346
<b>Under 3 Years- All Hearing Levels</b>	336	261	20	22	-	33
Under 45dB	5	4	-	1	-	-
45-64dB	20	17	2	-	-	1
65-84dB	38	29	1	4	-	4
85dB and Above	63	51	3	6	-	3
Data Not Available	210	160	14	11	-	25
<b>3 Years-Under 4 Years All Hearing Levels</b>	699	528	30	51	2	88
Under 45dB	23	15	-	3	-	5
45-64dB	38	27	2	3	1	5
65-84dB	109	84	4	6	1	14
85dB and Above	182	142	7	12	-	21
Data Not Available	347	260	17	27	-	43
<b>4 Years-Under 5 Years All Hearing Levels</b>	1,865	1,480	70	75	12	228
Under 45dB	21	16	-	2	-	3
45-64dB	120	102	4	2	1	11
65-84dB	323	265	8	16	-	34
85dB and Above	533	430	20	20	3	60
Data Not Available	868	667	38	35	8	120
<b>5 Years-Under 6 Years All Hearing Levels</b>	3,478	2,789	118	134	33	404
Under 45dB	79	40	2	6	3	28
45-64dB	224	180	5	8	3	28
65-84dB	635	522	12	18	6	77
85dB and Above	1,239	1,027	51	42	6	113
Data Not Available	1,301	1,020	48	60	15	158

<sup>1</sup>Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup>Age of student as of December 31, 1969.

TABLE 9: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE AT ONSET OF HEARING LOSS, ACCORDING TO PARENT TRAINING: UNITED STATES, 1969-70 SCHOOL YEAR.

Age at Onset of Hearing Loss	Total Number of Students	Parent Training <sup>1</sup>					
		Some Parent Training				Students Whose Parents Are Not Receiving Training	Data Not Available
		Total Students Whose Parents Are Receiving Training	Parents Enrolled in Special Parent Program & Correspondence Course	Parents Enrolled in Special Parent Program Only	Parents Enrolled in Correspondence Course Only		
All Ages at Onset	6,378	2,451	303	1,935	213	2,361	1,566
Onset at Birth	5,058	1,975	250	1,559	166	1,894	1,189
Under 1 Year	238	93	18	70	5	96	49
1 Year, Less Than 3 Years	282	110	17	78	15	97	75
3 Years and Over	47	13	2	8	3	17	17
Data Not Available	753	260	16	220	24	257	236

<sup>1</sup>Parent training refers to the number of students with one or both parents enrolled in special parent program or participating in a correspondence course during the 1969-70 school year.

TABLE 10: NUMBER OF STUDENTS UNDER SIX YEARS OF AGE ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS, ACCORDING TO PARENT TRAINING: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO) <sup>2</sup>	Total Number of Students	Parent Training <sup>1</sup>					
		Some Parent Training				Students Whose Parents Are Not Receiving Training	Data Not Available
		Total Students Whose Parents Are Receiving Training	Parents Enrolled in Special Parent Program & Correspondence Course	Parents Enrolled in Special Parent Program Only	Parents Enrolled in Correspondence Course Only		
All Hearing Levels	6,378	2,451	303	1,935	213	2,361	1,566
Under 45dB	128	36	6	21	9	55	37
45-64dB	402	147	32	104	11	156	99
65-84dB	1,105	450	53	360	37	410	245
85dB and Above	2,017	819	99	663	57	751	447
Data Not Available	2,726	999	113	787	99	989	738

<sup>1</sup>Parent training refers to the number of students with one or both parents enrolled in special parent program or participating in a correspondence course during the 1969-70 school year.

<sup>2</sup>Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

## **APPENDICES**

- Appendix I — Description of the Annual Survey of Hearing Impaired Children and Youth**
- Appendix II — Data Form Used for Students Under Six Years of Age in the Annual Survey for the 1969-70 School Year**
- Appendix III — Programs Participating in the Annual Survey of Hearing Impaired Children and Youth**

## APPENDIX I

# THE ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN AND YOUTH

### BACKGROUND AND PURPOSE

The Annual Survey of Hearing Impaired Children and Youth began its activities in May 1968. The program is established as a permanent research organization to collect, process and disseminate data on hearing impaired individuals through college age in the United States. The need for such information on this universe has been of prime concern to educators, audiologists, legislators, psychologists and others.

Two preceding years of pilot and developmental work in a five state area determined its operational feasibility and crystalized its methodology. The Division of Research, Bureau of Education for the Handicapped, Office of Education, Department of Health, Education and Welfare initiated the Annual Survey and provides the major share of its funding. The program is conducted by the Office of Demographic Studies of Gallaudet College.

The long range goal of the Annual Survey is to collect data on the entire hearing impaired population through college age in the United States. For operational reasons the hearing impaired population has been divided into three groups:

- GROUP A — Hearing impaired individuals who are receiving special educational services related to their hearing loss.
- GROUP B — Individuals who have been diagnosed as being hearing impaired but who are not receiving any special educational services.
- GROUP C — Individuals in the general population who, in fact, are hearing impaired but their hearing loss has not been diagnosed at a given point of time.

### POLICIES AND PRINCIPLES

It is of paramount importance that participating institutions be assured that the data collected will

be held in strictest confidence. Only staff members of the Office of Demographic Studies will have access to the records and then only for the purpose of preparing statistical summaries for analyses of the data. Individual student identification may be established by code numbers assigned and known only by the reporting institution. Each school will receive data on its own students, but no information permitting identification of any individual student or school will be published or made available for any purpose. Independent researchers will have access only to summary statistics and will not know the identity of the schools from which the data were compiled.

Of great importance is the fact that policies and direction of the Annual Survey are determined by a committee representing all areas of services to hearing impaired individuals. The committee is formally called the National Advisory Committee to the Annual Survey of Hearing Impaired Children and Youth. Its membership has broad width and depth in technical and executive expertise. In addition, a technical subcommittee composed of members of the Advisory Committee is called upon for advice and direction as special needs arise.

Suggestions and comments also come from discussions with teachers, audiologists, psychologists and other professionals who work directly with hearing impaired individuals. Also, aside from these direct contacts the staff members of the Annual Survey have with people in the field, periodic formal surveys of the cooperating educational programs are conducted to aid in determining the kinds of information needed in the field. To be effective, the program must assist these persons in solving problems with which they struggle day after day.

Since the Annual Survey attempts to promote the use of its data by those whose judgements and decisions will have a direct or indirect bearing on the education of hearing impaired individuals, it recognizes a responsibility to devote a part of its resources to the evaluation of the quality of the data collected and disseminated. This is particularly im-

portant because it seeks to establish national norms on the basic characteristics of hearing impaired children and youth that may be used by teachers, administrators and researchers. Thus, in the dissemination of information, the Annual Survey makes every effort to properly qualify the data and indicate any limitation associated with it.

Fourthly, the Annual Survey devotes part of its resources to developing the methodologies and instruments for best collecting data on a continuing basis for a national population of hearing impaired children and youth. The methodologies and instruments are of two basic kinds: (1) those associated with basic demographic variables that are collected on the total student population each year, and (2) those relating to the performance of the student in various areas, or to topics of special interest in a given year which may be collected on a sample basis.

## **DATA COLLECTION**

### **1968-69 School Year**

During the first year of the program, data collection activities were directed towards all schools for the deaf and a representative sample (15 percent) of all special classes. In addition, records on students who were receiving itinerant services were obtained in total from two states and in part from several states. In all 25,363 individual records were collected. This represented nearly 80 percent of the total enrollment of all institutions invited to participate.

Also during the first year, an academic Achievement Testing Program was conducted. Over 12,000 Stanford Achievement Tests were administered. The Annual Survey supplied testing materials and scoring services free of charge to participating programs. Achievement test scores for hearing impaired students based on the results of that testing program were published and distributed in the Fall of 1969. In addition, each participating school received distributions of achievement test scores based on the performance of their own students.

### **1969-70 School Year**

The Annual Survey extended its coverage during the second year of data collection. Efforts were made to reach students in all of the special classes for the hearing impaired, as well as in all of the schools. Data were obtained on 35,285 students from 435 reporting sources.

### **1970-71 School Year**

Over 550 reporting sources with about 41,000 students enrolled in their programs cooperated with the Annual Survey for the 1970-71 school year. This represents an increase of 164 new participating educational programs with almost 7,000 students. At the same time, about 94 percent of those programs that participated the previous year have been retained in this year's Survey.

An Achievement Testing Program was conducted by the Annual Survey. Approximately 19,000 students representing 290 programs participated in this program. The procedures followed in the current program were influenced heavily by the results of the 1968-69 school year. This influence was reflected especially in three areas: (1) Students were given a screening test to determine the most appropriate battery they should receive. (2) The schools were supplied with practice materials for their students, to familiarize students with test format and procedures. (3) In cooperation with Harcourt Brace Jovanovich, Inc., the test publishers, special printings of the Primary levels were arranged in which written instructions were provided to supplement oral ones. A reliability study also was conducted in conjunction with this year's Achievement Testing Program. This evaluation study will help to determine the reliability of an achievement test designed for hearing students when used by hearing impaired students. This study also was designed to shed some light on the validity of these tests.

## **PROGRAM SERVICES AND PUBLICATION OF THE DATA**

The program is accumulating a large volume of statistical data. The processing and dissemination of these data hold wide implications and potential benefits for educational, audiological, medical, psychological, legislative and other services to the hearing impaired. Towards the goal of fully utilizing the data, the program will make data available to independent investigators for research purposes. Masters' theses, doctoral dissertations, institutional level research programs, private studies, etc., are solicited. Competent researchers are encouraged to propose detailed analyses of the data to further increase its usefulness. The Office of Demographic Studies will not permit the data to be used in a manner that is not scientific or objective in its approach. The Annual Survey plans to produce at

least six major publications per year not including those that may be prepared by independent researchers using data collected by this program.

The Survey Office also provides each participating school or program with tabulations of the characteristics of their own students. The participating programs may obtain a set of punch cards containing the information submitted on each of their students. Further, the Annual Survey Office is available to provide consultation services to particular schools or school systems that are concerned with gathering and processing data on their students.

Participation in the Survey has led many of the programs to examine their current forms and record keeping procedures. This led to requests that the Survey develop a uniform record form to keep student information for use in schools and classes throughout the country. Such a form was developed

and used on a trial basis by a few schools during the 1970-71 school year. On the basis of this experience, the form was revised and distributed for use during the 1971-72 school year. Indications are that approximately half of the educational programs for the hearing impaired in the United States are planning to use the form during the 1971-72 school year.

The initial success of the Annual Survey can be measured only in terms of the levels of participation and interest expressed by many individuals. The ultimate success will be measured not in terms of volume of data that will be collected and published, but in terms of its contributions to improving educational and other opportunities for hearing impaired children and youth. In this regard, it appears that progress is being made. For the first time a vast body of statistical information is becoming available for research and planning purposes.

## APPENDIX II

OFFICE OF DEMOGRAPHIC STUDIES, GALLAUDET COLLEGE, WASHINGTON, D.C.

ACHIC-4

(This form is to be used for children who will become six years of age after December 31, 1969)

### ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN — 1969-70 School Year

**CONFIDENTIAL:** All information which would permit identification of any individual or institution will be held strictly confidential and will be used only by persons engaged in the survey for preparing statistical summaries. The data will not be disclosed to others for any other purpose.

Name of Reporting Source: \_\_\_\_\_

#### I. GENERAL INFORMATION

- A. 1. Name of Student \_\_\_\_\_ Date of Birth \_\_\_\_\_ Sex  M  F  
(Last) (First) (Middle) (Mo., Day, Yr.)
2. Residence \_\_\_\_\_  
(City) (County) (State)
- B. 1. Present School or Agency \_\_\_\_\_  
(Name)
2. Location \_\_\_\_\_  
(Number and Street) (City) (County) (State & ZIP Code)

#### II. EDUCATIONAL PROGRAM

- A. TYPE OF SCHOOL OR AGENCY
1.  School for Hearing  Residential School for Deaf  School for Multiply Handicapped  
 Classes for Hearing Impaired  Day School for Deaf  Speech and Hearing Clinic  
 Other (specify): \_\_\_\_\_
2. Is School or Agency:  Public  Private
3. Type of Student:  Residential  Day
- B. TYPE OF PROGRAM
1. Indicate number of hours per week the child is seen: \_\_\_\_\_ Hours Per Week
2. Is the child seen:  Individually  Group or  Both
3. Total time child has been enrolled in this school or agency: \_\_\_\_\_ Years \_\_\_\_\_ Months
4. Parent Training:  
 (a) Are parents enrolled in a special parent program:  Yes  No  
 (b) Are parents participating in a correspondence course:  Yes  No

#### III. EDUCATIONAL HISTORY

- A. Prior to the present program, has the child received other special educational training:  Yes  No
1. If YES, age started first program: \_\_\_\_\_ Years \_\_\_\_\_ Months
2. Type (specify): \_\_\_\_\_
3. Total time enrolled: \_\_\_\_\_ Years \_\_\_\_\_ Months

#### IV. HISTORY OF HEARING LOSS

- A. STUDENT HISTORY
1. Probable age at onset of hearing loss:  At Birth \_\_\_\_\_ Years of Age
2. Age hearing loss discovered: \_\_\_\_\_ Years \_\_\_\_\_ Months
3. If onset of loss at birth, what was probable cause (mark all that apply):  No Known Cause  Data Not Available  
 Maternal Rubella  Trauma to Mother  Prematurity  Complications of Pregnancy  Hereditary  
 Trauma at Birth  Medication During Pregnancy  RH Incompatibility  Other (specify) \_\_\_\_\_
4. If loss acquired after birth, what was probable cause (mark all that apply):  No Known Cause  Data Not Available  
 Meningitis  Mumps  Measles  Otitis-Media  Trauma  
 Other (specify): \_\_\_\_\_
5. Birth weight, if known: \_\_\_\_\_ lbs. \_\_\_\_\_ ozs.
- B. FAMILY HISTORY
1. Mother (check one):  Normal hearing before age 6;  Hearing loss before age 6;  Data not available.
2. Father (check one):  Normal hearing before age 6;  Hearing loss before age 6;  Data not available.
3. Siblings (indicate number in each category—If none, write "0"):  
 Total number \_\_\_\_\_; Normal hearing before age 6 \_\_\_\_\_; Hearing loss before age 6 \_\_\_\_\_;  Data not available
4. Does student have a twin:  Yes  No (If yes, complete items 4(a) and 4(b) below):  
 (a) Sex of twin:  M  F  
 (b) Is twin enrolled in this school:  Yes  No
5. Is there any familial history of deafness other than indicated above:  Yes  No
6. Are parents known to be related in any way?  Yes  No



## APPENDIX III

# Participants in the Annual Survey of Hearing Impaired Children and Youth

### ALABAMA

- Alabama Institute for the Deaf & Blind
- \*Bessemer City Schools
- Birmingham Public Schools
- \*Blossomwood Elementary School
- \*Children's Center of Montgomery, Inc.
- \*Etowah County Board of Education
- \*Franklin County Board of Education
- \*Holt Elementary School
- \*Huntsville Rehabilitation Center
- \*Lewis-Slossfield Speech & Hearing Center
- \*Mobile County Deaf Education Program
- \*Mobile Preschool for the Deaf, Inc.
- \*Tuscaloosa County Schools
- \*University of Montevallo Speech & Hearing Clinic

### ALASKA

- \*Alaska Treatment Center for Crippled Children & Adults, Inc.
- Anchorage Borough School District
- \*Bethel State School

### ARIZONA

- Arizona State School for the Deaf & Blind
- \*Emerson School
- Samuel Gompers Memorial Rehabilitation Center, Inc.
- \*Phoenix Day School for the Deaf
- Phoenix Elementary Oral Day Classes

### ARKANSAS

- Arkansas Speech & Hearing Center
- Jenkins Memorial Children's Center

### CALIFORNIA

- Alhambra City School District
- Alum Rock Union Elementary School District
- Anaheim Union High School District
- \*Aurally Handicapped Classes of Solano County
- Bellflower Unified School District
- Mary E. Bennett School for the Deaf
- Butte County Schools

- \*California School for the Blind, Deaf-Blind Department
- California School for the Deaf, Berkeley
- California School for the Deaf, Riverside
- Cedarcreek School for the Deaf
- Centinela Valley Union High School District
- Centralia School District
- Ceres Unified School District
- \*Chula Vista City School District
- Covina Valley Unified School District
- Cutler-Orosi Unified School District
- \*Downey Senior High School
- \*East San Gabriel Valley School for Multi-Handicapped Children
- Escondido Union School District
- Fremont Unified School District — Blacow Elementary
- Fresno City Unified School District
- \*Garden Grove Unified School District
- Goleta Union Elementary School District
- Hayward City Unified School District
- Chris Jespersen School
- Kern County Schools
- \*La Mesa — Spring Valley School District
- Lancaster Elementary School District
- \*Language, Hearing, & Speech Clinic, Fresno State College
- Little Lake City Elementary School District
- Livermore Valley Joint Unified School District
- Lompoc Unified School District
- Long Beach Unified School District
- Marin County Schools
- Marlton Elementary School
- Montebello Unified School District
- Monterey County Schools
- Mt. Diablo Therapy Center
- Mt. Diablo Unified School District
- Napa Valley Unified School District
- Norwalk-La Mirada Unified School District
- Oakland City Unified School District
- Orange Unified School District
- \*Orcutt Union Elementary School District

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

\*Pajaro Valley Unified School District  
 \*Palo Alto Unified School District  
 Pasadena City Unified School District  
 \*Placer County Public Schools  
 Pomona Unified School District  
 Redondo Beach City Elementary School District  
 Richmond Unified School District  
 Riverside Unified School District  
 Sacramento City Unified School District  
 \*San Bernardino County Schools  
 San Diego Unified School District  
 San Francisco Speech & Hearing Center  
 San Jose City Unified School District  
 San Juan Unified School District  
 San Mateo County Classes for the Deaf  
 San Mateo Union High School District  
 Santa Ana Unified School District  
 Santa Clara Unified School District  
 \*Santa Cruz County Itinerant Program for the  
 Hearing Impaired  
 Santa Rosa City School District  
 Shasta County Schools  
 Simi Valley Unified School District  
 \*South Junior High School  
 Southwest School for the Deaf  
 Stockton Unified School District  
 Sunnyvale Elementary School District  
 Sutter County Schools – Lincrest School  
 \*Tehama County Public Schools  
 Tulare County Schools  
 Tulare Union High School District  
 Union Elementary School District  
 Ventura Unified School District

#### **COLORADO**

\*Aurora Public Schools  
 Children's Hospital, Denver  
 Colorado School for the Deaf & Blind  
 \*Colorado Speech & Hearing Center, Denver  
 Colorado State College – Bishop Lehr Laboratory  
 Jefferson County Public Schools R-1  
 \*John Evans School  
 \*Meadow Elementary School  
 Pleasant View Elementary School  
 Poudre R-1 Services for Aurally Handicapped Children

#### **CONNECTICUT**

\*American School for the Deaf  
 Capitol Region Education Council – Hearing  
 Impaired Class

Class for Preschool Hearing Impaired Children,  
 Hartford  
 Easter Seal Goodwill Industries Rehabilitation  
 Center  
 \*East Hartford Public Schools  
 Enfield Public Schools – Preschool Hearing  
 Impaired Class  
 Fairfield Public Schools – Preschool Hearing  
 Impaired Class  
 Green Acres School  
 Hamden-New Haven Cooperative Educational  
 Center  
 \*Kings Highway School  
 Magrath School  
 Monroe Preschool Hearing Impaired Program  
 Mystic Oral School for the Deaf  
 Reynolds Preschool Hearing Impaired Program  
 South School  
 West Haven Department of Special Education

#### **DELAWARE**

Margaret S. Sterck School for Hearing Impaired

#### **DISTRICT OF COLUMBIA**

\*Capitol Region Model Secondary School for the  
 Deaf  
 Department of Special Education  
 Kendall School for the Deaf  
 Speech and Hearing Center – Public Schools of  
 the District of Columbia

#### **FLORIDA**

\*Allie Yniestra School  
 Brevard County Public Schools  
 Dade County Day Classes for Deaf  
 \*Easter Seal Rehabilitation Center, Fort  
 Lauderdale  
 \*Edge Elementary School  
 Florida School for the Deaf & Blind  
 Hillsborough County Public Schools  
 \*Holly Hill Elementary School  
 \*Jackson Memorial Hospital, Audiology –  
 Speech Pathology  
 \*Lee County Department of Special Education  
 \*Leon County Program for Hearing Impaired  
 Children  
 Robert McCord Oral School  
 Palm Beach County Schools  
 \*Pinellas County Schools  
 Rock Lake Elementary School

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

- \*Speech and Hearing Center, Inc., Jacksonville
- \*Tampa Oral School for the Deaf

#### GEORGIA

- \*Atlanta Public Schools
- Atlanta Speech School, Inc.
- Cobb County Board of Education
- The Davison School, Inc.
- Lawton B. Evans School
- Georgia School for the Deaf
- \*Houston Speech & Hearing School
- Savannah Speech & Hearing Center
- \*Robert Shaw Center

#### HAWAII

- Central Intermediate School
- Diamond Head School for the Deaf
- McKinley High School

#### IDAHO

- Idaho School for the Deaf & Blind
- Speech & Hearing Center – Idaho State University

#### ILLINOIS

- Bartonville Grade School Deaf Program
- Bell Elementary School
- Bi-County Oral Deaf Program
- Black Hawk Hearing Handicapped Program
- Champaign Community Schools
- Chicago Vocational High School
- Decatur Public School District
- Dixon State School
- Elim Christian School for the Exceptional Child
- Ericson School
- \*Nathaniel Greene School
- \*Harrison High School
- Dr. Robert Henner Hearing & Speech Center
- Illinois School for the Deaf
- \*The Institute for Hearing & Speech
- Jamieson School
- Maine Township Special Education Program
- Marquette Elementary School
- Thomas Metcalf School
- \*Morrill Elementary School
- Niles Township Department of Special Education
- \*Northern Suburban Special Education District
- Northwestern Illinois Association
- Northwest Suburban Special Education Organization

- Perry School
- \*Quincy Public Schools
- Ray School
- Reinberg School
- \*St. Joseph's Speech & Hearing Clinic
- Scammon School
- \*Shields Elementary School
- South Metropolitan Association for Low-Incidence Handicapped
- Special Education District of Lake County
- \*Springfield Public Schools
- Tazewell-Mason Counties Special Education Association
- \*James Ward Elementary School
- West Suburban Association for the Hearing Handicapped
- \*Williamson County Special Education District

#### INDIANA

- Ball State University
- Central Avenue School
- Deaf-Oral Nursery of the Rehabilitation Center, Evansville
- East Chicago Day Class for the Deaf
- \*Floyd County Preschool Deaf Class
- Glenwood Elementary School
- \*Hammond Public Schools
- \*Hearing & Speech Center of St. Joseph's County, Inc.
- Indiana School for the Deaf
- Indiana University Medical Center
- Marion Community Schools
- \*Michigan City Area Schools
- \*Morrison-Mock School
- Oral Deaf Classes & Hearing Conservation Program, South Bend
- \*Trade Winds Rehabilitation Center, Inc.

#### IOWA

- Black Hawk-Buchanan County Board of Education
- Cedar Rapids Community School
- \*Dubuque County Schools
- Hope Haven School
- Iowa School for the Deaf
- Ottumwa Community School District
- Smouse Opportunity School
- Wilson School – Oral Deaf Department

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

## **KANSAS**

- Hays Regional Classroom for the Hard-of-Hearing
- \*Hoisington Unified School District #431
- Institute of Logopedics, Inc.
- Kansas School for the Deaf
- Lawrence Unified School District 497 – Grant School
- \*Salina Public Schools
- \*Speech & Hearing Clinic, Kansas State University
- \*Topeka Public Schools
- \*Mark Twain Elementary School
- University of Kansas Medical Center
- Wichita Public Schools

## **KENTUCKY**

- Kentucky School for the Deaf
- Knox Central High School
- Lexington Deaf Oral School
- Louisville Deaf Oral Institute
- Louisville Public Schools
- \*West Kentucky Easter Seal Center for Crippled Children & Adults

## **LOUISIANA**

- Acadia Parish School Board
- Delgado College
- Jefferson Parish School Board
- Lafayette Parish School Board
- Louisiana School for the Deaf
- Speech & Hearing Center of Southwest Louisiana, Inc.
- State School for the Deaf – Southern Branch
- Sunset Acres School

## **MAINE**

- Bangor Regional Speech & Hearing Center
- Governor Baxter State School for the Deaf
- Northeast Hearing & Speech Center, Inc.
- Pine Tree Society

## **MARYLAND**

- William S. Baer School #301
- Baltimore County Department of Special Education
- \*Board of Education of Harford County
- Forest Park Senior High School
- Gateway Preschool
- Maryland School for the Deaf
- Montgomery County Public Schools
- \*Pikesville Junior High School

- \*Prince George's County Public Schools
- \*Special Education Center, Hagerstown

## **MASSACHUSETTS**

- \*Belmont Public Schools
- Beverly School for the Deaf
- Boston School for the Deaf
- Peter Bulkeley School
- Clarke School for the Deaf
- \*Communications Disorders Department, Franklin County Public Hospital
- Day Class for Preschool Deaf, Lowell
- Sarah Fuller Foundation
- Habilitation Center for the Pre-School Hard-of-Hearing & Deaf Children, Canton
- Haverhill Preschool Class for Deaf
- \*Horatio A. Kempton School
- \*Lawrence Primary Program for the Deaf
- \*Leominster Day Classes for the Hearing Impaired
- \*Horace Mann School for the Deaf
- Mercer School
- Myrtle Street School
- Page School
- Perkins School for Blind
- \*Reading Day Class for Deaf
- \*Willie Ross School for the Deaf
- Thayer-Lindsley Parent Centered Nursery
- Upsala Street School
- Waltham Public Schools
- Woburn Day Class Program
- \*Worcester County Hearing & Speech Center

## **MICHIGAN**

- \*Allen Park Public Schools
- \*Brighton Public Schools
- Howard D. Crull Intermediate School
- \*Delta-Schoolcraft Intermediate School District
- Detroit Day School for Deaf
- Douglas School
- Durant-Tuuri-Mott School
- \*Eastern Michigan University Speech & Hearing Clinic
- Handley School
- Ida Public Schools
- Thomas Jefferson School
- \*Kalamazoo Public Schools
- Ann J. Kellogg School
- \*Lakeview Elementary School, Negaunee
- Lakeview Public Schools
- Lansing Public Schools

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

Lapeer State Home & Training School  
 John A. Lemmer School  
 Lutheran School for the Deaf  
 Marquette Elementary  
 \*Michigan School for the Deaf  
 Michigan School for the Blind  
 \*Michigan State University Speech & Hearing  
 Clinic  
 Mott Foundation Children's Health Center  
 Oakland Schools  
 Preschool Physically Handicapped Program,  
 Wyoming  
 Public School Program for Deaf & Hard-of-  
 Hearing, Jackson  
 Redford Union Hard-of-Hearing Program  
 Riverside Elementary School  
 Shawnee Park Schools  
 \*Speech Clinic of the University of Michigan  
 Medical School  
 Tecumseh Public Schools  
 Traverse City Public Schools  
 Tri-County Preschool  
 Utica Schools  
 Warren Consolidated Schools  
 \*Wayne Community School District

#### **MINNESOTA**

\*Anoka-Hennepin School District #11  
 \*Austin Public Schools  
 Duluth Public Schools  
 Lutheran High School  
 Minneapolis Public Schools  
 Minnesota School for the Deaf  
 St. Paul Area Program for Impaired Hearing  
 Technical Vocational Institute

#### **MISSISSIPPI**

\*Mississippi School for the Deaf  
 \*Tupelo Regional Rehabilitation Center

#### **MISSOURI**

\*Central Institute for the Deaf  
 Delaware Elementary School  
 \*Gallaudet School for the Deaf  
 Hearing & Speech Center, Kansas City  
 Humboldt School  
 Missouri School for the Deaf  
 \*Neosho Public Schools  
 \*North Kansas City Public Schools

St. Louis County Special School District for the  
 Handicapped – Litzsinger School  
 St. Louis University Speech & Hearing Clinic  
 School District of Kansas City

#### **MONTANA**

Montana State School for the Deaf & Blind  
 University of Montana Speech & Hearing Clinic

#### **NEBRASKA**

Nebraska School for the Deaf  
 Omaha Hearing School for Children, Inc.  
 \*Omaha Public Schools  
 Prescott Acoustically Handicapped Unit

#### **NEVADA**

Ruby Thomas Elementary School  
 \*Washoe County School District

#### **NEW HAMPSHIRE**

Crotched Mountain School for the Deaf  
 \*Easter Seal Rehabilitation Center of Greater  
 Manchester  
 Portsmouth Rehabilitation Center

#### **NEW JERSEY**

\*American Institute for Mental Studies  
 Avon School  
 Bruce Street School  
 Class for the Hard-of-Hearing, Kearny  
 Clifton Public Schools  
 \*Cumberland County Public Schools  
 Douglas Nursery for Hearing Handicapped  
 Hackensack Program for the Deaf  
 Helmbold Education Center  
 Hunterdon Medical Center Nursery for Hearing  
 Impaired Children  
 \*Marie H. Katzenbach School for the Deaf  
 \*The Midland School  
 Millburn Avenue School  
 Newark State College  
 \*North Jersey Training School  
 \*Speech & Hearing Center, Burlington County  
 Memorial Hospital  
 Summit Speech School  
 Township Public Schools, Neptune  
 Woodbridge Public School System

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

## NEW MEXICO

- \*Albuquerque Hearing & Speech Center
- New Mexico School for the Deaf

## NEW YORK

- Albany Medical Center Hospital
- Board of Cooperative Educational Services,  
Nassau
- \*Board of Cooperative Educational Services,  
Suffolk County II
- \*Board of Cooperative Educational Services,  
Suffolk County III
- \*Board of Cooperative Educational Services of  
Washington, Warren, & Hamilton Counties
- \*Buffalo Public Schools
- Catholic Charities Day Classes for Deaf Children
- Cerebral Palsy Preschool
- Children's Hospital & Rehabilitation Center
- \*Demonstration Home Program, Rochester
- \*Dutchess County Board of Cooperative  
Educational Services
- \*Erie County Board of Cooperative Educational  
Services
- Grasslands Hospital
- \*Alexander Hamilton School #31
- \*Hebrew Institute for the Deaf
- Junior High 47-M School for Deaf
- \*Meadowbrook Hospital Speech & Hearing Clinic
- \*Mill Neck Manor Lutheran School for the Deaf
- New York Institute for the Education of the Blind
- New York School for the Deaf, White Plains
- New York State School for the Deaf, Rome
- \*Queens College Speech & Hearing Center
- \*Rensselaer County Board of Cooperative Educa-  
tional Services
- Rochester School for the Deaf
- \*St. Francis de Sales School for the Deaf
- St. Joseph's School for the Deaf
- St. Mary's School for the Deaf
- School for Language & Hearing Impaired  
Children – Public School 158
- Suffolk School for Deaf Children
- Union-Endicott Central School District

## NORTH CAROLINA

- Charlotte Speech & Hearing Center, Inc.
- Duke University Medical Center
- Eastern North Carolina School for the Deaf
- \*Mecklenburg School – Department of Special  
Education

- The Governor Morehead School
- North Carolina School for the Deaf  
Path School, Inc.

- \*Wake County Preschool for the Hearing Impaired

## NORTH DAKOTA

- Longfellow School
- \*Minot State College Speech & Hearing Clinic
- North Dakota School for the Deaf
- University of North Dakota Speech & Hearing  
Clinic

## OHIO

- Akron Board of Education
- \*Alexander Graham Bell School, Columbus
- Alexander Graham Bell School for the Deaf,  
Cleveland
- Betty Jane Oral School
- Canton Public Schools
- Cincinnati Educational Center
- \*Clark County Hearing & Speech Center
- \*Cleveland Heights High School
- \*Elyria City Schools
- Hearing & Speech Center of Columbus and  
Central Ohio
- \*Howard Day School for the Hearing Impaired
- \*L.B. Kean Elementary School
- Kennedy School for the Deaf
- Kent Public Schools
- Kent State University
- Litchfield Rehabilitation Center
- \*McKinley Elementary School
- Mansfield City Schools
- Millridge Center for Hearing Impaired
- Ohio School for the Deaf
- Program for Physically Handicapped, Toledo
- \*St. Rita's School for the Deaf
- \*Springfield City Schools
- Trumbull County Hearing Society
- Warren City Schools
- \*Youngstown Public Schools
- Zanesville Classes for Deaf

## OKLAHOMA

- Community Speech & Hearing Center, Enid
- Eastside School
- The Junior League Program for Children with  
Hearing Losses
- \*Kerr Junior High School

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

Oklahoma City Public Schools  
\*Oklahoma School for the Deaf  
University of Oklahoma Medical Center  
\*Washington School

#### **OREGON**

Hearing and Speech Center, Eugene  
Oregon State School for the Deaf  
Portland Center for Hearing & Speech, Inc.  
Portland Public Schools  
Tucker-Maxon Oral School  
\*Washington County Intermediate Education  
District

#### **PENNSYLVANIA**

Archbishop Ryan Memorial Institute for the Deaf  
De Paul Institute  
\*Ebensburg State School and Hospital  
\*Elwyn Institute  
Erie City School District  
\*Home of the Merciful Saviour for Crippled Children  
Willis and Elizabeth Martin School  
\*Pennhurst State School and Hospital  
Pennsylvania School for the Deaf  
Pennsylvania State Oral School for the Deaf  
\*The Pittsburgh Hearing & Speech Society, Inc.  
Western Pennsylvania School for the Deaf  
Programs for Speech & Hearing Handicapped:  
Adams County Schools  
Allegheny County Schools  
Armstrong County Schools  
Beaver County Schools  
Bedford County Schools  
Berks County Schools  
Blair County Schools  
Bradford County Schools  
Bucks County Schools  
Butler County Schools  
Cambria County Schools  
Cameron County Schools  
Carbon County Schools  
Centre County Schools  
Chester County Schools  
Clarion County Schools  
Clinton County Schools  
Crawford County Schools  
Cumberland County Schools  
Dauphin County Schools  
Delaware County Schools  
Elk County Schools

Erie County Schools  
Fayette County Schools  
Franklin County Schools  
Fulton County Schools  
Greene County Schools  
Huntingdon County Schools  
Indiana County Schools  
Juniata County Schools  
Lackawanna County Schools  
Lancaster County Schools  
Lawrence County Schools  
Lebanon County Schools  
Luzerne County Schools  
Lycoming County Schools  
McKean County Schools  
Mercer County Schools  
Mifflin County Schools  
Monroe County Schools  
Montgomery County Schools  
Montour County Schools  
Northampton County Schools  
Northumberland County Schools  
Perry County Schools  
Pike County Schools  
Potter County Schools  
Schuylkill County Schools  
Snyder County Schools  
Somerset County Schools  
Sullivan County Schools  
Susquehanna County Schools  
Tioga County Schools  
Venango County Schools  
Warren County Schools  
Washington County Schools  
Westmoreland County Schools  
York County Schools

#### **RHODE ISLAND**

\*Preschool Language Class at Meeting Street School  
\*Rhode Island Hospital Hearing & Speech Center  
Rhode Island School for the Deaf  
\*Windmill Hearing Therapy Program

#### **SOUTH CAROLINA**

Charleston County Schools  
\*Estes Elementary School  
Florence County School District #3  
\*Hearing and Speech Center, Columbia  
\*Keowee Schools

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

- \*Parker House Education Center for Hearing Handicapped Children
- Pate Elementary School
- \*Pee Dee Hearing & Speech Center
- \*Spartanburg Speech & Hearing Clinic
- South Carolina School for the Deaf & Blind
- United Speech & Hearing Services

#### **SOUTH DAKOTA**

South Dakota School for the Deaf

#### **TENNESSEE**

- \*Arlington State Hospital & School
- \*Clover Bottom Hospital & School
- East Tennessee State University – Speech & Hearing Clinic
- \*Green Valley Hospital & School
- Hamilton County Speech & Hearing Center
- \*Knox County Public Schools
- Memphis City Schools
- Memphis Parents' School for Deaf & Aphasic
- Memphis Speech & Hearing Center
- Metropolitan Schools of Nashville & Davidson County
- Sunnyside School
- Tennessee School for the Deaf
- University of Tennessee – Preschool Deaf Program
- Bill Wilkerson Hearing & Speech Center

#### **TEXAS**

- \*Abilene Public Schools – Day Class for the Deaf
- Amarillo Regional Hearing & Speech Center
- Austin Independent School District
- Baylor Speech & Hearing Clinic
- \*Bi-County Deaf & Hard of Hearing School, Brownsville
- \*Bexar County School for the Deaf
- P.F. Brown Elementary School
- The Callier Hearing & Speech Center
- Corpus Christi Independent School District
- County-Wide Area Day School, El Paso
- Dallas Independent School District
- Dallas Society for Crippled Children
- \*Easter Seal Society for Crippled Children & Adults of Tarrant County, Inc.
- \*Farias Special Education School
- Grayson County Crippled Children & Adult Center
- \*Harlandale Independent School District

- Houston Independent School District
- Houston School for Deaf Children
- \*Houston Speech & Hearing Center
- Helen Keller Special Education School
- \*Midland Independent School District
- Multi-County School for the Deaf
- Pasadena Independent School District
- \*Port Arthur Independent School District
- \*Sunshine Cottage School for Deaf Children
- Tarrant County Day School for Deaf
- \*Temple Memorial Treatment Center
- Texas Christian University Speech & Hearing Clinic
- Texas School for the Deaf
- Waco Independent School District
- Wichita Falls Independent School District

#### **UTAH**

- Brigham Young University – Communicative Disorders Clinic
- Utah Schools for the Deaf & Blind
- Utah State University – Edith Bowen Laboratory School

#### **VERMONT**

- Austine School for the Deaf

#### **VIRGINIA**

- Arlington County Public Schools
- Blue Ridge Speech & Hearing Center, Inc.
- \*Bristol Memorial Hospital Speech & Hearing Center
- \*Charlottesville Public Schools
- \*Chesterfield County Public Schools
- Diagnostic, Adjustive & Corrective Center for Learning
- Diagnostic Special Education School of Tidewater
- Rehabilitation Institute
- St. Paul's Oral School
- Virginia School for the Deaf & Blind
- Virginia State School for the Deaf at Hampton

#### **WASHINGTON**

- Bellingham School District #501
- \*Bellevue Public Schools
- Bremerton School District 100-C
- \*Edmonds School District #15
- Edna E. Davis School
- \*Kent Public Schools
- \*Northshore School District #417

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

\*Seattle Community College, Classes for the Deaf  
Seattle Public Schools  
\*Shoreline School District #412  
University of Washington – Experimental  
Education Unit  
Washington State School for Blind  
Washington State School for the Deaf  
\*Washington State University Speech & Hearing  
Clinic  
Yakima School District #7

#### **WEST VIRGINIA**

\*Kanawha Hearing & Speech Center  
West Virginia School for the Deaf & the Blind

#### **WISCONSIN**

Bartlett School

Berryville School  
City District Public Schools, La Crosse  
Cooper Day School for Deaf  
Day School for Deaf, Wausau  
Madison Public Schools  
Milwaukee Hearing Society, Inc.  
\*Oshkosh Program for Hearing Impaired Children  
\*Pleasant Hill School  
\*St. John's School for the Deaf  
School for the Deaf, Green Bay  
E.H. Wadewitz School  
\*Washington School, Sheboygan  
Wisconsin School for the Deaf

#### **WYOMING**

Wyoming School for the Deaf

\*Programs that joined the Survey during the 1970-71 school year. Data from these programs are not included in this report.

## REPORTS FROM THE ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN AND YOUTH

### SERIES D

- No. 1 Academic Achievement Test Performance of Hearing Impaired Students—United States: Spring 1969
- No. 2 Item Analysis of Academic Achievement Tests Hearing Impaired Students—United States: Spring 1969
- No. 3 Additional Handicapping Conditions, Age at Onset of Hearing Loss, and Other Characteristics of Hearing Impaired Students—United States: 1968-69
- No. 4 Type and Size of Educational Programs Attended By Hearing Impaired Students—United States: 1968-69
- No. 5 Summary of Selected Characteristics of Hearing Impaired Students — United States: 1969-70
- No. 6 Audiological Examinations of Hearing Impaired Students — United States: 1969-70
- No. 7 Characteristics of Hearing Impaired Students Under Six Years of Age, United States: 1969-70