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The purpose of this project was to develop recommendations and plans for program, personnel, and facilities for a new Horace Mann Center for the Deaf as a replacement for and an expansion of the present school. The project staff's initial proposal took into account the existing background, programs, and needs of the deaf in Massachusetts. The overall recommendations at this stage of the project called for construction on the same site as a new elementary school; establishment of satellite elementary and resource secondary classes; an evaluation center; a nursery-kindergarten unit which would include parental involvement; an elementary school unit; a secondary level-adult unit; common facilities such as library, instructional material center, cafeteria, auditorium, physical education and recreational facilities, prevocational industrial arts and home economic areas; and preparation of professional personnel and research programs. Areas requiring further planning include enrollments and size of faculty, planning the adjacent elementary school, costs and funding, administrative structure, recruiting and hiring of personnel, professional training, the problems of residential facilities and non-aural systems of communication, and vocational rehabilitation of deaf adults. Appendixes and a 138-item bibliography are presented. (Author/RP)

ED026787

FEB 3 1969

# **The Horace Mann Planning Project**

**A DESIGN**

for a

## **COMPREHENSIVE CENTER AND EDUCATIONAL PROGRAM**

for

### **COMMUNICATIVE DISORDERS**

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A cooperative Project of the Boston Public Schools and Boston University under a grant from the U.S. Department of Health, Education and Welfare, Title III of PL 89-10, Elementary and Secondary Education Act of 1965.

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
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## Acknowledgment

The task of this project was to develop recommendations and plans for Program, Personnel and Facilities for a new Horace Mann Center for individuals with impairment of auditory functioning as a replacement for and an expansion of the present Horace Mann School for the Deaf. This was truly a cooperative project involving all public and private agencies involved with programs for the hearing impaired in Massachusetts, and including consultants at the national level. The project staff wishes to express its appreciation for the extensive, constructive and enthusiastic assistance given by so many individuals, only a portion of whom could be identified in this report. The recommendations in this report represent the thinking of many people. Their support and assistance is gratefully acknowledged.

The project would not have been possible without the financial assistance from the U.S. Office of Education through a grant to the Boston School Department under the provisions of Title III of the Elementary and Secondary Education Act of 1965.

Finally, this project would not have been undertaken without the instigation of a group of parents who requested expanded and innovative services for their children.

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A Design for a School and Center for Communicative Disorders

I. THE PLANNING PROCESS

Background

In May, 1965, the parents of the Horace Mann Home and School Association approached Boston University with the request that Boston University consider assisting them in the development of a new and improved program in the Horace Mann School for the Deaf. A conference between Dr. Wilbert Pronovost and Dr. Allan Schill of Boston University and Miss Eileen Connolly, Principal, and Miss Edith Rosenstein, Assistant Principal of the Horace Mann School for the Deaf, identified a mutual interest in the development of a new facility for deaf children in Eastern Massachusetts. Shortly thereafter, approval was given by Dr. William Ohrenberger, Superintendent of Schools of the City of Boston, and Dr. Jack R. Childress, Dean of the School of Education of Boston University, for exploratory conferences to determine a procedure for mutual cooperation and planning. Dr. Charles Ruddy, Associate Superintendent, City of Boston, was assigned to work with Dr. Pronovost and Miss Connolly in the developing of a cooperative arrangement. The first cooperative program, developed with the approval of the Boston School Committee, was the assignment of three students from Boston University's program in Education of the Deaf to engage in individual work with children at the Horace Mann School for the Deaf, under Dr. Pronovost's direction. This activity resulted in several conferences between Boston University faculty and the staff of the Horace Mann School to identify areas of need and mutual interest.

In December, 1965, the Council for Exceptional Children sponsored a conference in Chicago, Illinois, concerning creative use of Federal legislation. Dr. Pronovost and Mr. William Philbrick, Director of Special Education for the State of Massachusetts, were in attendance at the conference and

Planning Process (cont.)

concluded that Title III of the Elementary and Secondary Education Act might provide a suitable means for seeking a planning grant in order to be able to plan in detail specifications for a Horace Mann Center for Communicative Disorders. A proposal to this effect was made by Miss Connolly and Dr. Pronovost to Mr. William Cunningham, Associate Superintendent of the Boston School Department, and Mr. Evans Clinchy, Director of the Office of Program Development. Inclusion of a proposal for a planning grant for a Horace Mann Center for Communicative Disorders within the planning proposals of the City of Boston was approved. The proposals were submitted to the U.S. Office of Education in January, 1966. The planning project proposal was approved and funds were allocated for inauguration of a planning project for a year, September 1, 1966 to September 1, 1967.

Needs of the Deaf in Massachusetts

The needs of the deaf in Massachusetts were identified as being similar to those reported to Secretary of Health, Education and Welfare by an advisory committee on the deaf.

1. The need for education of preschool deaf children at an earlier age, at least beginning at age two;
2. The need for greater emphasis on speech and language development among preschool and primary grade deaf children;
3. The need for more intensive parent education and guidance;
4. The need for more extensive educational diagnosis of deaf children to determine each child's special problems;
5. The need for instructional materials and methodologies that will deal with the current problem of educational retardation of deaf children, especially in language development, reading ability, communicative skills, and concept formation;

Planning Process (cont.)

6. The need to develop provisions for deaf children with associated learning and behavior disorders, and for children with other types of auditory disorders, such as partial hearing, or aphasia;

7. The need for an educational program that will provide for maximal integration of deaf children with normally hearing children while providing the special educational programs required by the deaf children.

8. The need to provide for secondary education programs for deaf children who cannot function in regular high schools without help, but who, with a teacher of the deaf as the English language arts teacher and tutor and a guidance counselor, could make maximal use of a wide variety of secondary education programs in nearby schools;

9. The need for greater attention to job placement and post-secondary education planning while deaf pupils are still in the secondary schools;

10. The need for a center for adult deaf to pursue continuing education and obtain necessary clinical services and counseling. Such a program is needed in a professionally staffed Center and can use the same space as that provided for the secondary program; and

11. The need to provide a center concerned with the above needs which can make possible research and training of teachers of deaf children with associated problems.

Existing Programs

The Horace Mann School for the Deaf, administered by the City of Boston and supported by total reimbursement of costs by the Division of Special Education of the State Department of Education, serves as a regional day school for deaf children from Eastern Massachusetts. The Horace Mann School for the Deaf is the oldest day school for the deaf in the United States. The enrollment of children in the Horace Mann School in 1966-67 was 106 children.

Planning Process (cont.)

McCabe, B.F., in the "Etiology of Deafness", Volta Review 65; 471-477, November, 1963, cites a prevalence rate in the general population of 0.2 to 0.4 percent of hearing impaired children who require special education and three to six per cent incidence of children with mild hearing losses. The Bureau of Special Education of Massachusetts State Department of Education estimates that 0.55 percent of the public and private school population of 1,333,000 pupils, or 7,330 pupils, are hearing impaired. Currently, approximately 850 children are enrolled in public and private schools and day classes for the deaf, 1,500 hearing impaired children are receiving some form of speech and/or hearing services from 300 speech and hearing specialists in 180 cities and towns. Thirty-eight cities and towns are providing supplemental tutoring in academic subjects for 100 hearing impaired children.

In Massachusetts, the identification of children with hearing impairments occurs in medical centers, in the private offices of physicians (especially otologists) and through the school hearing testing program conducted under the auspices of the State Department of Public Health. Such children are referred for otological and other medical examinations and audiological examinations. When required, a complete assessment, - medical, audiological and psychological-, is undertaken. Assessment in one or more of these three areas occurs in medical centers, community or university speech and hearing clinics, and schools for the deaf. The extent of the assessment services is highly variable from one institution to another. Referrals between medical and audiological units for supportive services is frequent and occurs in most cases of severe hearing impairment. Psychological services are less available. Only two institutions (both medical centers) provide medical, audiological and psychological services.

Most institutions providing audiological services are approved centers for hearing aid evaluations and financial assistance to parents from the

Planning Process (cont.)

State Department of Public Health in the purchase of hearing aids. Pre-school programs for hearing impaired children, including parent education and guidance in varying degrees, are conducted in some speech and hearing clinics, in special programs of the State Department of Public Health, and at the Horace Mann School for the Deaf. Upon the child's attainment of school age, the speech and hearing clinics often assist the parents in selecting the educational setting to which they will apply for enrollment of their child.

Areas of Planning

One of the methods of organizing the planning activities was through the designation of programs to deal with the needs which had been previously identified. Each of these programs could conceivably become a unit within a comprehensive facility or a section of a unit. The program areas for which planning was undertaken were:

1. An Educational Evaluation and Individualized Services Program,
2. A Nursery-Kindergarten-Parent Education Program,
3. An Elementary School Program, including a specialized program for deaf children with associated learning, behavior and physical problems ,
4. A Secondary Education Program,
5. An Adult Education Program,
6. A Program of Research and Preparation of Professional Personnel.

For each one of these programs the planning procedures involved the identification of objectives, the outlining of assumptions on which the operation of the program would be based, the identification of the activities of children and staff within the program, personnel needed to conduct the program and specifications for physical facilities for the program.

Planning activities for each unit involved considerable interaction between the planning staff and educational groups, community groups and consultants. Planning conferences included:

Planning Process (cont.)

1. Continual conferences with teachers of the Horace Mann School and members of the Boston School Department.
2. Meetings with all community agencies and centers concerned with programs of evaluation, individualized services, or education of the deaf.
3. Meetings with administrative personnel of other schools for the deaf in Massachusetts.
4. Individual and group meetings with national leaders in the education of the deaf who were invited to Boston to assist in the planning.
5. Meetings with an advisory committee of the Boston University School of Education consisting of one representative from each of the departments in the school of education. This committee was made up of individuals from all areas of education who were not familiar with the education of the deaf but were familiar with current practices in the education of all children, at all levels.
6. Meetings with Miss Marianne McKeon, Supervisor of the Education of the Deaf for Massachusetts Department of Education who was designated the official representative of the State Division of Special Education to the Horace Mann Planning Project. Miss McKeon was active throughout the planning in many of the planning conferences mentioned above. Mr. William Philbrick, State Director of Special Education, has also been in contact with the project throughout the planning process.
7. Meetings with the staff members of the Office of Program Development and with Project Directors of other Title III planning projects and the advisory committee for Title III projects. Every attempt was made to coordinate the Horace Mann Planning Project with related activities of other planning projects. This procedure was particularly useful in some of the joint planning activities of the Horace Mann Project and the Tufts-Quincy School Project.
8. Visits by the project staff to schools for the deaf in various portions and parts of the United States in order to study other programs in action.
9. Conduction of a survey of Massachusetts children evaluated or enrolled in centers throughout the country in order to determine the extent of programs to be required for deaf children with associated learning, behavior or physical problems.
10. Participation of the project director, educational specialist and the teachers of the Horace Mann School in national and international conferences related to the education of the deaf.
11. Conferences with State Senator Kevin Harrington concerning Senate Bill 124, submitted by Senator Harrington and providing for the establishment by the Department of Education of a Center in the City of Boston to be known as the Horace Mann Center for Communicative Disorders.
12. Preparation and submission of a proposal to the U.S. Office of Education for a pilot project to provide an Educational Evaluation, Educational Programming and Individualized Services Unit for Children with Auditory Disorders in the present Horace Mann School. This has been approved for 1967-1970.
13. Dissemination of information about the project through newspaper stories, speeches and papers presented at conferences.
14. Bibliography.

Planning Process (cont.)

Another aspect of planning classroom environments involved Dr. Allan Leitman of the Education Services, Inc., Science Project. Science materials for use by children in self-initiated learning activities were introduced into four classrooms. Films of children's activities before and during the use of science materials showed the considerable extent of the children's involvement in their own learning and the need for the design of a variety of classroom areas suitable for the variety of learning activities in which children engage.

As planning activities for each unit were completed, a preliminary document was developed. When all units had been planned in draft form, two group conferences were held to react to the preliminary recommendations for the entire complex. A one day conference was held with Eileen Connolly and Edith Rosenstein, Horace Mann School; Marianne McKeon, State Department of Education; Bertram Berenson, Hampton Institute of Architecture; Leo Connor, Lexington School for the Deaf; Allan Leitman, Educational Services, Inc.; Harrie Selznick, Baltimore Public Schools Department of Special Education; Mrs. Charlotte Carr, Project Secretary; and the Project Director. A two day conference was held with members of the Boston University Advisory Committee and Administrative Officers of the Boston School Department. As a result of these conferences, final recommendations were determined and minor revisions suggested for the final document.

Overall Recommendations

1. It is recommended that the Horace Mann Center for Communicative Disorders be constructed on the same site as a new elementary school. The geographic location should be in the western section of Boston. Such a location is the most logical in relation to those of the Boston School for the Deaf in Randolph and the Beverly School for the Deaf in Beverly.
2. It is recommended that the Horace Mann Center for Communicative Disorders contain the following physical units:
  - a. An evaluation and individualized services unit to provide for initial and ongoing evaluation, educational programming and individualized services for individuals with communicative disorders of all age levels and from any educational setting.
  - b. A nursery-kindergarten unit that includes provisions for parent education and parental involvement in the development of young children with communicative disorders.
  - c. An elementary school unit with classrooms designed to provide the type of life experiences and learning experiences required by deaf children, with provisions for classroom environments and programs for hearing impaired children with associated physical, learning or behavior disorders.
  - d. A secondary level-adult unit consisting of a small number of seminar-type classrooms in which secondary school pupils may receive supplemental group and individual instruction with specialized equipment and adults may enroll for continuing education.
  - e. Common facilities to be shared with the adjacent elementary school and available for community functions:
    - 1) Library and Instructional Materials Center.
    - 2) Cafeteria.
    - 3) Auditorium.
    - 4) Physical education and recreational facilities.
    - 5) Pre-vocational industrial arts and home economics areas.
  - f. Facilities such as seminar rooms, research areas, offices, and provisions for observation in order to provide for a program of research and preparation of professional personnel.
3. It is recommended that selected elementary schools be designated, on a regional basis, as the location of satellite classrooms for hearing impaired children who need not attend the Horace Mann elementary school unit.

Recommendations (cont.)

4. It is recommended that classrooms be designated within a comprehensive high school as resource classrooms for high school deaf students. It is recommended that four such classrooms be provided within the new Madison Park Comprehensive High School.

The following assumptions and guiding principles form the basis of the recommendations:

1. Communicative disorders refer to impairments of hearing, speech or language function. The focus of the Horace Mann Center will be on individuals with hearing impairments. Any individual with known or suspected auditory dysfunction may be referred for appropriate educational evaluation and programs. Programs within the Horace Mann School will concentrate on:
  - a. The group of hearing impaired individuals commonly known as deaf, that is, having severely reduced hearing sensitivity.
  - b. The group of hearing impaired individuals, including some commonly known as hard-of-hearing, who require educational programs and services beyond those that can be provided in a regular school with supplemental itinerant services.
  - c. The group of hearing impaired individuals whose learning, behavior or physical problems require special programs or classroom environments.

The evaluation and individualized services programs could be made available to children with speech disorders, if such were desired in the future.

2. Hearing impaired children can be educated by an aural-oral approach in a curriculum which parallels that of the normally hearing child.
3. Hearing impaired children can progress educationally from a special classroom program through increasing amounts of educational interaction with normally hearing children.

Recommendations (cont.)

4. Hearing impaired children will benefit from maximal interaction with the normally hearing society. Social and educational interactions are desirable pedagogical techniques.
5. The education of hearing impaired children can begin as early as infancy, or at any time the deafness is detected.
6. An educational program for hearing impaired children requires intensive parent education and parental involvement.
7. An educational program for hearing impaired children must be based on the child's participation in numerous life-experiences in order to compensate for the sensory deprivation of deafness. Therefore, classroom and curriculum design must provide for learning through experience.
8. Hearing impaired children with associated learning and behavior disorders require highly flexible programs and classroom environments to meet their educational needs.
9. Many environmental experiences which provide for incidental learning in normally hearing children must be provided for within the school and classroom setting to compensate for the sensory deprivation of deafness. The educational program must intensify the scope and variety of sensory inputs during the teaching-learning process.
10. The educational program for hearing impaired children should extend beyond the classroom into the home and the community to provide guided learning experiences.
11. An educational program for hearing impaired individuals requires ongoing and multi-disciplinary educational evaluation, with individualized educational services supplementing classroom instruction.
12. Specialized provisions are required for the education of many deaf individuals through high school and adult levels.

Diagram of Proposed Units  
of  
The Horace Mann Center for Communicative Disorders

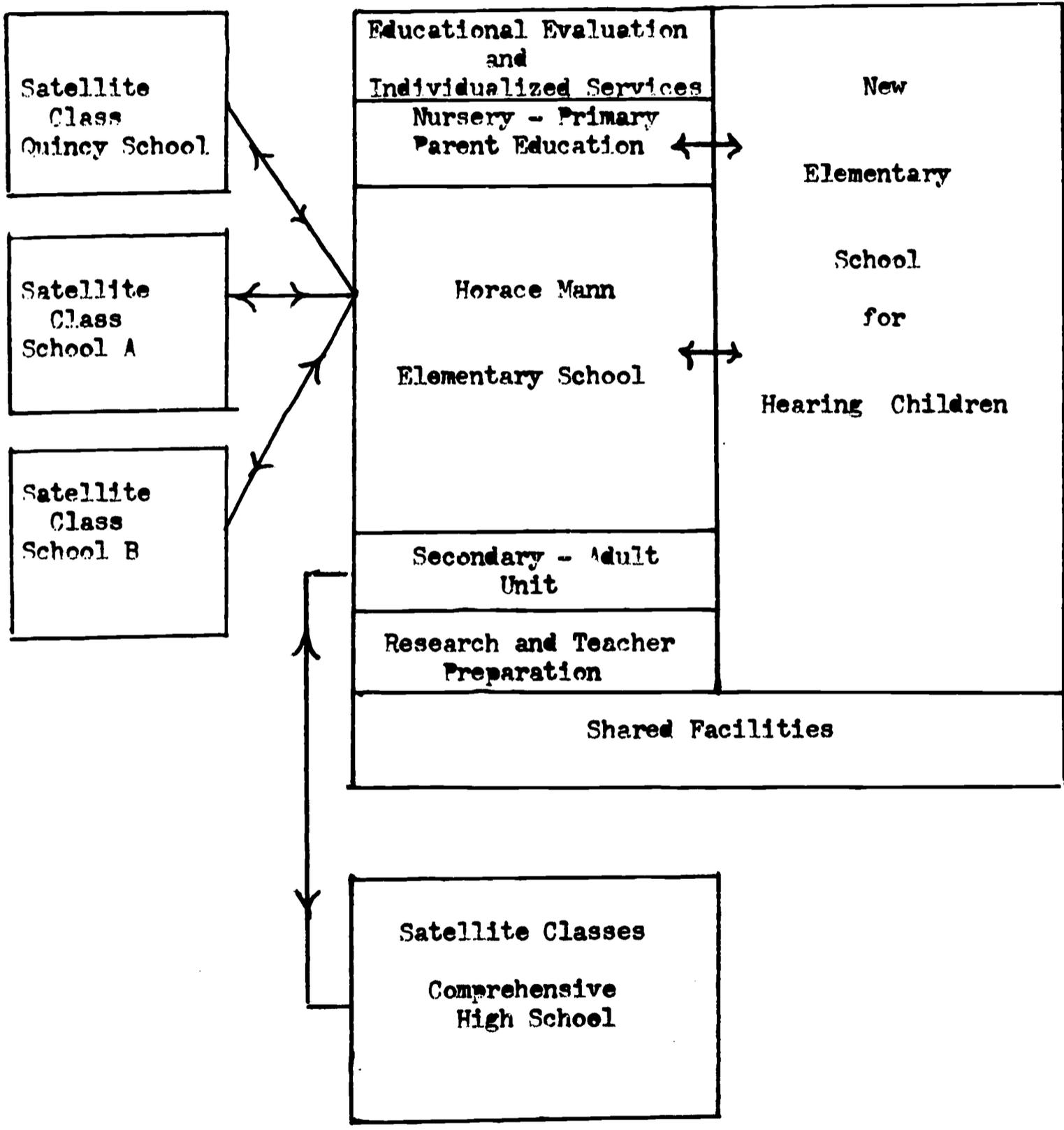


Figure #1

RELATIONSHIP  
of

HORACE MANN CENTER FOR COMMUNICATIVE  
DISORDERS

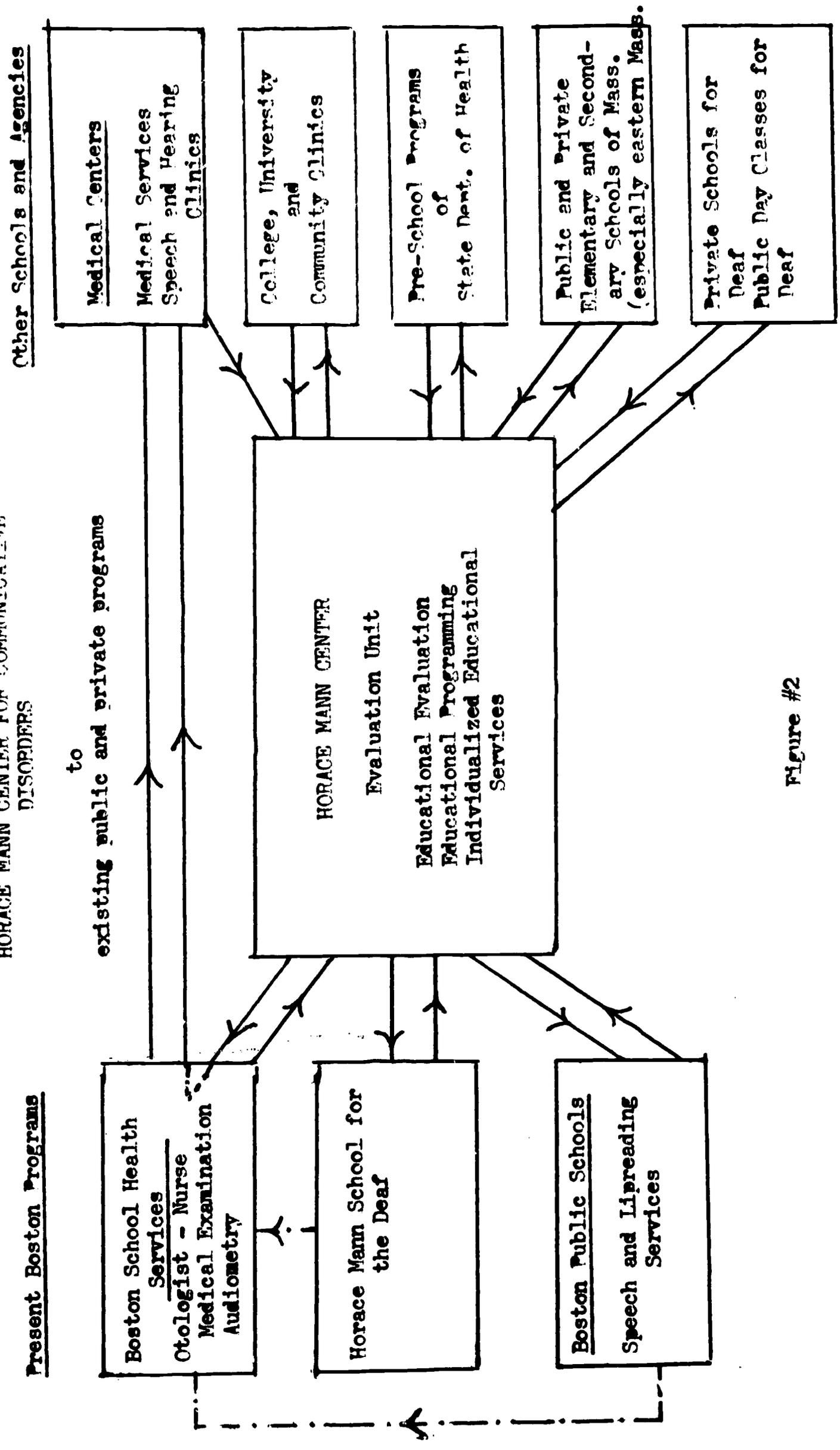


Figure #2

### III. THE PROPOSED PROGRAM

The program of the Horace Mann Center for Communicative Disorders will be available to any individual with a known or suspected hearing impairment.

Initial contact of a hearing impaired individual or his family will be through the Evaluation Unit. Referrals to the Center may be made by any person who is aware of the known or suspected auditory disorder. It is assumed that the majority of referrals of pre-school age children will come from physicians or medical centers which provide some type of medical-audiological evaluation prior to referral, and from public health nurses and community agencies. School age children may be referred by the school personnel. Parents of hearing impaired children may contact the Center directly if they desire. Parents are often anxious to turn to an educational setting for assistance when they have questions about their child's educational future and educational program. Whenever a parent initiates a referral, the staff of the evaluation unit, through the nurse and otologist, will insure that adequate medical records are available or that referrals are made for necessary medical examinations. The Center will also accept self-referrals from older deaf individuals including adults, with the same guarantees of referrals to medical centers whenever that is necessary.

The staff of the evaluation unit will undertake the evaluation of the child and his family, in order to determine the appropriate program. This evaluation will involve all necessary members of the multi-professional staff, focusing on the recommendations for an educational program that might begin as early as infancy. The multi-professional staff involved in this evaluation will include psychologists, an audiologist, an educator of the deaf, a nurse, an otologist, a rehabilitation counselor, a social worker, or any other special educational personnel who might be required. The evaluation program usually will require more than one visit to the evaluation unit.

The Proposed Program (cont.)

If a child is accepted for the program of the Center both the child and his parents will be enrolled for the program. The program for the pre-school unit will be focused on the development of language concepts and communicative skills in the child, with intensive involvement of the parents.

A pre-school child would come to the Center with his mother and in the early stages of the program probably interact with both a teacher of the deaf and his mother in the simulated home environment of the Center. On the basis of these interactions the teacher of the deaf would make recommendations to the parents concerning activities to be carried out in the home. Parents would bring the child to the Center as often as the needs of the child would seem to indicate. However, the actual number of visits per month will vary from child to child depending on the parental situation. The teacher of the deaf will also be available to go to the child's home, observing the interactions of the child with members of his family and making suggestions to the family concerning appropriate family activities which would reinforce the development of language and communicative skills. Again the proportion of time which would be spent by the child in the Center, or in his home with a teacher of the deaf in attendance, will vary greatly from one child to another. In addition to the activities of the teacher of the deaf with the child and his family, the counseling staff of the Center, either the psychologist, social worker or guidance counselor would be available to help parents deal with problems they perceive in relation to their child. In this connection, there would be group meetings for parents in the evenings at the Center. These group meetings might take the form of instructional sessions from the teacher of the deaf or group counseling sessions with the appropriate counseling personnel. As the child reaches nursery school age, the amount of time spent in the Horace Mann School would be increased. The child would be enrolled in the nursery- pre-school program on a regular basis with parents in

Program (cont.)

attendance whenever this seemed desirable for the child. The program of the nursery school would involve interaction with other children in a regular nursery room supplemented by individual sessions with the teacher of the deaf for instruction in the development of language concept and communication skills. At this particular age an attempt would be made to guide the child into situations where there would be interaction with normally hearing children. This may be through the discussions of the teacher of the deaf and the parents related to the program at home where there are normally hearing siblings, or with playmates in the neighborhood. It may involve the invitation to have normally hearing siblings or children from the neighborhood come to the nursery and participate in the nursery activities with the deaf child. It may involve placement of the child for varying periods of time in a regular nursery school setting for normal children. The program of interaction with normally hearing children would be completely flexible according to the needs and abilities of each individual child.

As the child reaches kindergarten age he will attend classes at the Horace Mann School on a daily basis. The kindergarten program will be structured such that the child will receive appropriate group and individual instruction from a teacher of the deaf assisted by a teacher aide and from any supportive personnel that may be necessary. Most children will receive daily individual instruction in the development of communication skills. Throughout the nursery and kindergarten years the parent education and guidance and counseling program will continue to be available. In addition a child will be evaluated periodically by the professional team of the evaluation unit, in order to determine the child's progress and indicate the direction of future educational programs.

By the time a child has reached kindergarten age, he should have developed some independence of action and should be able to interact with the

Program (cont.)

kindergarten children of the adjacent elementary school in certain playground, lunchroom, and recreational activities in which the children of the regular kindergarten classes are engaged. In the early stages of this interaction with normally hearing children it may be necessary for the teacher of the deaf to be present. However, it is assumed that children will gradually be able to function more independently and children from a particular kindergarten class for the deaf may be able to be distributed as individuals through more than one kindergarten classroom of the regular elementary school.

Children of elementary school age will be taught in classes of approximately six children in the Horace Mann School. The instructional program will parallel that of the regular curriculum whenever feasible. The program will emphasize language and communication skills as well as concept development in the early years. Classrooms will be designed to provide a variety of areas in which different types of learning and teaching can take place. The classrooms will be designed to provide for intensification of visual and auditory stimuli. Audio-visual teaching materials will be used in abundance, and appropriate auditory training systems will be installed.

Children of elementary school age enrolled in the Horace Mann School for the Deaf will interact with their peers in regular classrooms as much as is appropriate. The probability is that the younger the child the greater the interaction will be in non-academic subjects. As children become older, they may be able to interact in certain science activities which may involve learning by doing. As their own language communication skills develop they may be able to spend portions of the school day in regular classrooms, particularly as their language and communication skills are adequate for the particular learning task being conducted in the regular classroom. In all these attempts at interaction, the teachers of the Horace Mann School will maintain responsibility for the hearing impaired child and for most of his instruction.

Program (cont.)

A program for parents will be continued throughout the elementary school years although the amount of time spent by parents in the school setting will obviously be less than that of the pre-school program. It is hoped that sufficient contact with parents can be maintained so that they will be constantly aware of the goals of the child's educational program and may be able to reinforce them in the home and neighborhood settings. The role of the parent in providing out of school learning experiences and contact with normally hearing children of the community, and the desirability of taking advantage of community resources and programs, will be stressed.

Some children in the elementary school may develop a sufficient amount of competency and adjustment to be able to be assigned to satellite classrooms in various neighborhood schools. These would be regular classrooms in an elementary school with appropriate audio-visual equipment. Children would attend classes here when they no longer required, daily, the supportive services of the Horace Mann Center, and could function in a special classroom within the regular school. Children in the satellite classes would probably spend a greater proportion of their time in regular classrooms with their hearing peers with the teacher of the hearing impaired serving as a resource teacher, as their teacher of language and communication skills and as the tutor to help them in the various study skills required by the subjects of the regular classrooms.

Flexible and specialized programs will be required by the hearing impaired children with associated learning and behavior problems. Recommendations for educational placement and programming will be made through the evaluation unit. Certain classrooms in the elementary unit of the Horace Mann School will permit rearrangement of teaching areas and materials to meet the needs of the children. While some homogeneity of grouping in each classroom should be possible, emphasis will be placed on individualized

Program (cont.)

instruction. Class size should not exceed four pupils. It is assumed that the children with associated learning and behavior problems will make extensive use of the evaluation unit for continuing assessment of potential and needs. It is also assumed that these children may be slower to achieve the competencies which will permit them to interact in classrooms of the adjacent elementary school. Experience has shown, however, that some children will develop the competencies that will permit them to follow the program of the elementary and secondary units previously described.

Some children may reach a sufficient level of educational achievement, communicative ability and adjustment to be able to function in high schools with normally hearing peers so that as they complete the program of the elementary school either in the Horace Mann School or in satellite classes they will be able to attend regular high schools for normally hearing children and profit from the educational program. A few of them may need to return to the evaluation unit of the Center for supplemental individualized services. A majority of children who remain at the Horace Mann School through their elementary school years, will probably require a specialized type of high school program. The high school program of the Horace Mann Center will be conducted through satellite classes in a comprehensive high school for the normally hearing. This program is being developed in order that deaf high school students may take advantage of the wide variety of course offerings in the variety of programs available in a comprehensive high school. However, deaf high school students will have a home room that is especially equipped with the necessary audio-visual equipment. Their home-room teacher will be a teacher of the deaf who will also be their English Language Arts teacher so that they can receive instruction in the

Program (cont.)

English Language Arts in small groups with a curriculum that is suited to their particular needs as deaf children having special problems in language development and usage. The teacher of the deaf will also serve as a resource teacher to provide tutoring in academic subjects and to assist children in developing appropriate study skills. The deaf children would have all of their study periods with the teacher of the deaf in their special classroom. Separate special classrooms would exist for each group of eight pupils at each high school grade level. In addition, deaf high school pupils will have the services of a counselor who has experience with problems of deaf adolescents in making adjustments to a hearing society and to a high school program with normally hearing peers. The counselor will deal not only with the adjustment problems but will also undertake early evaluation of each pupil's vocational and future educational plans. Because some high school age children may be placed in other secondary or vocational educational settings and require supportive tutoring and individualized services at the Center, four resource-seminar type classrooms will be available at the Horace Mann Center, one for each high school grade level, so that high school pupils may return to the Center for specialized services not available elsewhere.

The program of the Horace Mann Center will also be available to deaf adults who may wish to further their education by utilizing the facilities of the Center. A program of continuing academic education with focus on reading and language skills can be continued. Adults may also take advantage of the pre-vocational facilities of the school and of the educational evaluation services. In addition, special facilities of the school may be used by adults for their own social

Program (cont.)

and recreational programs which might be conducted under their own direction. Counselors and teachers will also be available at the Horace Mann Center to assist deaf adults in taking advantage of programs offered by the Adult Education Programs of the City of Boston.

The Horace Mann Center for Communicative Disorders will be actively involved, through cooperation with universities of the Boston area, in the development of innovative programs, in research, and in the preparation of professional personnel.

The essence of the proposed program is comprehensiveness coupled with flexibility. By utilizing all community resources, the staff of the Horace Mann Center will be committed to the goal of assisting hearing impaired individuals achieve the highest possible level of functioning in society.

Evaluation and Individualized Services UnitObjectives:

1. To provide comprehensive educational evaluation and assessment of hearing function for individuals with known or suspected auditory dysfunction at any age level, from infancy through adulthood.
2. To provide complete otologic services by a physician (School Otologist) and a nurse, in order to evaluate the diagnosis of the causative conditions and advise patients as to treatment and prognosis of hearing disorders.
3. To provide counseling and referral services to assist hearing impaired individuals and their families in obtaining appropriate services in schools, medical centers and agencies.
4. To provide individualized educational and counseling services when such services are not available to the hearing impaired individual in other settings.
5. To provide trial educational programming as a basis for determining a child's patterns of learning and the most appropriate educational procedures to meet the child's (or adult's) individual needs.
6. To provide ongoing contact with the educational setting in which a child is placed, through teacher consultations and demonstrations of teaching procedures, so that the educational setting can meet the child's individual needs.
7. To provide periodic reevaluations and follow-up services in order to determine the efficacy of recommended programs and to suggest modifications of educational and counseling programs as indicated by the reevaluations.
8. To make the above services available to children in all educational settings. The program is not limited to the children enrolled or being considered for enrollment in the Horace Mann School.

Evaluation Unit (cont.)

Assumptions:

1. Comprehensive evaluation procedures involved the interprofessional cooperation of educational and medical personnel including psychologist, audiologist, clinical teacher, otologist, nurse, social worker, rehabilitation counselor, etc.
2. A major proportion of the individuals with auditory disorders referred to the Unit will have previously participated in assessment programs of medical centers, schools or community agencies.
3. Coordination with referring agencies will be maintained by appropriate medical or educational personnel of the evaluation center.
4. Referrals to the evaluation unit may occur through a variety of sources, including:
  - a. Referral to School Nurse and Otologist for hearing testing, examination and recommendations.
  - b. Referral to Principal of the Horace Mann School for the Deaf for educational placement.
  - c. Referral directly to the director of services of the evaluation unit.
  - d. Parents of hearing impaired children or hearing impaired adults may request services directly from the evaluation unit.
5. Specific evaluation procedures and individualized services will vary according to individualized needs and the information provided by referral sources.
6. Evaluation is an ongoing process. Period reevaluations are required to determine progress and need for changes in educational programming or placement.
7. Individualized services in the form of counseling, academic tutoring and development or refinement of communicative skills may be required by many children or adults who are not participating in any of the educational programs of the Horace Mann School.

Evaluation Unit (cont.)

Activities of Children, Parents or Hearing Impaired Adults and Staff:

1. Parents, children or adults will enter unit through a reception area and lounge. Receptionist will check appointments, etc.
2. Parents and children will remain in lounge area until called for appointment. Children may play in adjacent area to parent's lounge. Parents may remain in lounge area (siblings may remain in play area) while child is being seen for professional services in unit.
3. An adult may remain in the lounge area while awaiting appointment for professional services.
4. Children or adults will participate in individual evaluation by a psychologist, rehabilitation counselor or clinical teacher in evaluation rooms.
5. Children or adults will participate in individual evaluation by an audiologist in a two-room sound-controlled audiology suite. A reception area with play materials outside the psychological and audiological evaluation rooms is desirable.
6. Parents or Hearing Impaired Adults will confer with appropriate staff members - social worker, psychologist, audiologist, nurse, otologist, counselor, clinical teacher, etc. in individual counseling rooms.
7. Children, parents or adults will participate in individual tutoring or counseling in an individual tutoring-therapy room.
8. Children may participate in a variety of educational activities in an educational programming classroom, containing several areas for different activities.
9. Observations of selected activities will be made by one-way vision observation windows or closed-circuit television by students and researchers.

10. Children and adults may receive audiometric testing, otological examinations and appropriate school health services in the health service areas.
11. Children may receive some services from students from affiliated colleges and universities under supervision of the Center staff.
12. Staff members may demonstrate procedures to students.
13. Staff conferences will be held to develop recommendations for programs and referrals.
14. Research activities may involve individuals enrolled for Center services.

Personnel:

Coordinator of Services

Receptionist

One for appointments and inquires

One for evaluation and play areas

Psychologist (Educational, Clinical, Counseling)

Audiologist

Clinical Teacher (More than one required. Combined staff should have preparation and experience in diagnostic teaching, speech pathology, and teaching of deaf, retarded, disturbed and language disordered children.)

Nurse

Otologist

Social Worker

Guidance Counselor

Rehabilitation Counselor

Medical Consultants in Ophthalmology, Pediatrics, Neurology and Psychology

Special Educational Consultants in Speech Pathology, Emotional Disturbances, Physically Handicapped, Remedial Reading, Mental Retardation, Learning Disorders

Secretaries

Aides for Educational Programming Classrooms

Custodians

Facilities:

Reception Area and Lounge

Reception desk and counter

Parents' lounge area with rest rooms

Children's lounge and play area

Coordinator's Office

Secretarial Office and Records Room

Staff Conference Room

Evaluation Room - Psychological (more than one required)

Testing table for children with chairs and platforms

Testing table for adults

Open area for children

Storage for testing materials

Evaluation Room - Clinical Teachers (more than one required)

(Same as Psychological Rooms)

Audiology Suite

Commercially available two-room sound controlled suite-- overall dimensions 10' x 19'

Office- Counseling Rooms for

Psychologist

Social Worker

Audiologist

Rehabilitation Counselor

Office-tutoring rooms for Clinical Teachers

Unassigned Counseling Rooms for consultant staff and students use with children and adults

Unassigned Tutoring-Therapy Room for consultant staff and students use with children and adults. Children's chairs on platforms to level of teacher's table. Area for children to engage in physical activity. Some rooms should be large enough for small groups of 3 or 4 children.

Educational Programming Classroom (at least 2 required)

Group Teaching Area

Multi-purpose Area

Individual Study Desks Area

Individual Tutoring Area

Observation - provision is needed for closed-circuit television and some one-way vision observation in all areas of this unit.

Health Services Unit

Nurse's Room - Health Services

Nurse's Office with counseling area

Medical Examination Room

Office for Otologist and Consultant Medical Staff

Hearing Testing Suite - sound controlled

Equipment Storage

Supplies Storage

Custodial and Maintenance Areas

The Nursery-Kindergarten-Parent Education Unit

Objectives:

1. To provide a program for the parents of young hearing handicapped children.
  - a. To counsel, guide and support parents professionally in order that they may assume, comfortably, their natural roles as parents with their hearing handicapped children.
  - b. To alert parents to the special communication needs of their child and to help parents find resources within themselves to provide for these needs within the framework of family living.
  - c. To offer parents whatever auxiliary education and counseling they need in order to participate, to the maximum, in their child's social, emotional and intellectual development.
  - d. To portray to parents the supportive role of the school and to make articulate, through action, the importance of continuous cooperation between the home and school.
2. To provide a program for hearing handicapped children from infancy through kindergarten.
  - a. To provide learning experiences which will guide and stimulate language development, concept development and aural-oral communicative skills.
  - b. To provide, in the school, and to encourage in the home and community, a wide variety of life experiences which stimulate physical, emotional and social development so as to counteract the sensory deprivation imposed by the hearing handicap.

Assumptions:

1. Parents of hearing handicapped children have a wide range of emotional needs, attitudes about handicapped children, and information about the nature of hearing loss.
2. A hearing handicapped child's home situation can contribute significantly to his development.
3. Hearing handicapped children's home situations will vary greatly in ability to provide for all of a child's developmental needs.
4. An effective program for hearing handicapped children requires a combined home and school program.

Nursery-Kdgtn-Parent (cont.)

5. The majority of young hearing impaired children referred to the Horace Mann Center will have received prior medical-audiological assessment in a medical setting.
6. All children accepted for the nursery-kindergarten unit will be referred to the unit following comprehensive evaluation in the evaluation unit.
7. All children enrolled in the nursery-kindergarten unit will be re-evaluated periodically through cooperative efforts with the staff of the evaluation unit.
8. Some children enrolled in the nursery-primary unit will be able to attend nursery programs for normally hearing children under the supervision of the staff of the Horace Mann Center.
9. All personnel of the Evaluation Unit will be available as consultants to the staff of the Nursery-Kindergarten-Parent Education Unit.
10. All curriculum and subject matter specialists of the Elementary School Unit will be available as consultants to the Nursery-Kindergarten-Parent Education Unit.

Activities of Parents:

1. Opportunities to interact informally with other parents and hearing impaired children in an area that combines a parent lounge and children's play area.
2. Participation, according to individual need, in a counseling, guidance and educational program that includes:
  - a. Counseling and guidance through group therapy for  
Discussion (and release) of parental feelings, reactions to the child's handicap(s) and to the resulting treatment of the handicap.  
Discussion of "short course" content to make it subjective.  
Exposure of matters requiring individual counseling and referral.

Nursery-Kdgtm-Parent (cont.)

- b. Individual counseling or discussion with a counselor and/or teacher of the deaf.
- c. A short course concerned with parent attitudes, child development and child management.
- d. A short course concerned with the communicative process, communication with a deaf child, deafness and home language stimulation.
- e. Interaction with the child and a teacher in a simulated home situation in a room containing kitchen, dining, living and sleeping area. The teacher will interact with the child as a model for parental behavior and observe parental interaction with the child. Comments on parental interaction will be made in individual conferences.
- f. Observe child in nursery or kindergarten through one-way vision window or closed circuit television, with comments by teacher or counselor.
- g. Interact with child at home during visits by the teacher or counselor in order that school personnel may assist parents in using the home situation for maximal effectiveness.

Activities of children:

1. Infants and very young children (under age two) will interact with parents and teacher-clinicians in activities related to the development of conceptual and communicative skills. These activities will occur in the simulated home area or an adjacent room.
2. Children of nursery school age (age two or over) may participate in activities with parents and teachers in the simulated home situation.
3. Children enrolled in the nursery school groups will participate in the following learning experiences and activities designed to satisfy children's urges to think, invent, discover, construct and create:
  - a. Undirected active play involving gross muscular activity.
  - b. Activities related to housekeeping that will stimulate language and concept development.
  - c. Activities related to the environment- e.g., science materials and concepts, crafts, etc.
  - d. Group activities with nursery teacher involving story telling,

Nursery-Kdgtn-Parent (cont.)

dramatization, conversation, music, and other informal listening and speaking activities.

- e. Visual-perceptual and visual-motor activities which contribute to eye-hand coordination, reading readiness, etc.
- f. Quiet activities with books, games, etc.
- g. Creative play - water play, sand play, painting, block building, etc.
- h. Teacher directed group activities designed to develop communicative skills of listening, observing, speaking, etc.
- i. Individual contact with a teacher-clinician in an adjacent room for activities related to the development of communicative skills.

4. Children in kindergarten will engage in activities similar to those listed for the nursery school group (see item 3) but at a higher developmental level. The classroom program will focus on the continuing development of language and number concepts and of communicative skills. Learning activities will be drawn from all areas of the curriculum, e.g., science, social studies, physical activities, etc. Children will be involved in individualized as well as group activities.
5. All children will be seen in the Evaluation Unit for period re-evaluations.

Personnel Required:

Coordinator - Supervisor  
Secretary-Receptionist  
\*Teacher-clinician for infant program and parent education  
Counselor(s)

These individuals will probably be the same persons as those in the Evaluation Unit, and may include the psychologist (s), social worker, or guidance counselor depending upon the specific needs of the parent or parental program.

Nursery Teacher(s) and Teacher Aide (s)  
\*Teacher-clinician(s) for nursery program  
Kindergarten Teacher(s)  
\*Teacher-clinician for kindergarten program

\*Note: The term teacher-clinician is used to refer to the persons who will provide the individualized services in language

## Nursery-KdgtN-Parent (cont.)

development and communicative skills. It is assumed that such individuals will be teachers of the deaf who have received intensive preparation in the area of language development, communicative skills, assessment procedures, and parent education and counseling.

### Facilities Required:

#### Coordination and Supervision:

Office for Coordinator-Supervisor

Office for Secretary and Secretary-Receptionist

Small conference room - informal - lounge type chairs and large coffee table (4 persons maximum)

Rest Room

Parent Lounge - This lounge should provide for parents of young children who may remain at the Center for one or two hours while children are attending the Center program. Provision should be made for a sink and counter for preparation of coffee and light snacks.

An adjacent play area should be provided for young siblings of handicapped children whenever parents need to bring other young children with them.

Restrooms for parents and children should be provided. Facilities should be adequate for a maximum of 20 parents at any one time.

#### Conference Room for Parent Groups:

This room would be used for group counselling or education. A flexible arrangement of tables and arm chairs is requested so that groups ranging in size from 5 to 20 could discuss, with or without a conference table arrangement. One wall of the conference room should provide a blackboard and a screen for educational talks and films and projection booth.

Two cubicles should be provided for individual parent education by self-operated audio-visual materials or short individual conferences with staff members.

Bookshelves are required for library materials for parents.

Storage areas for materials used in parent education are required.

### Simulated Home Area:

This area should be a large room in which areas simulate the rooms of a home. The areas should be kitchen, dining, living, play and bedroom-bathroom areas, with appropriate furnishings. Furnishings should be selected for specific usefulness in language and concept development so that teachers can demonstrate appropriate parent-child activities to be used in the home to stimulate and reinforce develop-

## Nursery-Kdgtn-Parent (cont.)

ment of language concepts and communicative skills.

### Nursery Classroom:

#### 1. Areas within classroom:

- a. Teaching area - children sit on movable chairs in semi-circle in front of or behind, narrow tables which can be arranged in semi-circular or hexagonal fashion. Wall areas should provide for blackboards, projection screen, and bulletin board type display areas. Storage areas should provide for convenient storage and easy access to teaching materials, including charts and pictures.  
A picture window should be adjacent to the teaching area so that the outdoor area and weather can be used in teaching of concepts.
- b. Cloakroom area - The area should contain lockers for individual children's clothing and other personal property, but should not be visually isolated from the teaching areas.
- c. Science area for learning activities and displays in relation to animals, flowers, plants, mechanical play equipment, etc. This area should be adjacent to the picture window for use in correlating indoor and outdoor science concepts.
- d. Sink-kitchen area with adjacent children's lavatory. Sink will be used for painting and clean-up. Kitchen area will be used by teachers to teach concepts related to food preparation, etc. and should be similar to pullman-type kitchens containing electric stove, refrigerator and sink. While used by teachers, children will observe cooking, etc. so that height of equipment should be such as to permit children to see what is being done. This area should be able to be closed off when not in use by the teachers.
- e. Water and sand play area adjacent to children's sink.
- f. Library Corner - Books and quiet games around a table and chairs.
- g. Music and Play Area - Storage areas should include materials for block building, wood-working, musical instruments, so that the area may be used for play activities or for listening activities. Woodworking table should be able to be stored out of sight.
- h. A doll house area should provide space for doll furniture and play for all rooms of a house, i.e., kitchen, dining, living and bedrooms. A picture window should be located in this area.
- i. Play area - Central portion of room should be available for dramatic play, rest mats, etc.

Nursery-KdgtN-Parent (cont.)

2. Observation Area:

This area should permit a group of persons (parents, student teachers, etc. to observe all areas of the room. It is suggested that the one-way windows be above the children so that the observers look down on the entire area. The floor of the observation room can be raised. Counters should be built at bottom of windows for note taking. Observers sit on stools.

3. Tutoring Room:

Teacher's desk and chair  
Two conference chairs and small coffee table  
Tutoring area -  
    Table at teacher's sitting height  
    Children's chairs on raised platform  
    One way mirror adjacent to table for observation  
    Observation room - comfortable chairs for parents

Kindergarten Classroom(s):

Teaching area (similar to nursery room)  
Cloakroom area  
Lavatory  
Sink and painting area  
Science area - with picture window  
Play area  
Library Corner and Quiet Area  
Individual tutoring area or adjacent room  
Observation area for both classroom and individual area  
Outdoor area

Playroom - Active area

Climbing  
Sliding  
See-saw  
Bicycle riding  
Use of wagons, trucks - (all wheel toys)  
Use of balls, jump ropes, etc.  
Construction - use of hollow blocks, boards, saw horses

Outdoor area:

Swinging  
Climbing  
Sliding  
Bicycle riding  
Sand box  
Water play  
See saw (Saw horses, boards, hollow blocks)  
Crawling (concrete hollow forms)  
Gardening

The Elementary School Unit

Objectives:

1. To provide for children with auditory disorders an elementary school education that is comparable to that of normally hearing children; whose aims are to develop:

Healthy Individuals, Social-Minded Individuals, Intelligent Individuals, Aesthetic-Minded Individuals, Spiritually Vigorous Individuals, Worthy American Citizens. (Boston Public Schools Curriculum Guide)

2. To provide a curriculum that develops physical, emotional, mental and social well-being.

3. To provide a curriculum that provides for the development of knowledge, understandings, skills and attitudes in relation to:

Language and Concept Development  
Communicative Ability  
Physical and Biological World  
Social Environment  
Historical Aspects of Society  
Democratic Systems and Government  
The Family, including Household Arts  
Mathematical Concepts (number systems)  
Vocational Awareness

4. To provide a flexible program that will help the deaf child progress educationally from a special classroom program through increasing amounts of educational interaction with normally hearing children.

5. To provide an educational program that is based on the child's participation in numerous life experiences, in order to compensate for the sensory deprivation of deafness, through introducing these life experiences into the classroom and through parental and community involvement in providing these experiences in the home and community.

6. To develop in a deaf child the early awareness of the value of oral communication to himself in order to arouse in him the desire to communicate orally with us.

Elem. Unit (cont.)

7. To teach the child to think clearly and logically; to form concepts and conceptions; to weigh; to consider; to make judgements; to reach conclusions.

8. To instill an awareness of learning as a continuing process.

9. To instill in the child a sense of responsibility for his actions and his learning so that he will grow in independence and towards maturity.

10. To help the child reach his full potential.

11. To develop thinking, contributing members of society with an understanding and appreciation of their own personal worth, with rights and responsibilities parallel with the rights and responsibilities of others.

12. To provide special educational programs for hearing impaired children who have associated learning, behavior or physical disabilities.

Assumptions:

1. Hearing impaired children can be educated by an aural-oral approach in a curriculum which parallels that of the normally hearing child.

2. Hearing impaired children can progress educationally from a special classroom program through increasing amounts of educational interaction with normally hearing children.

3. Hearing impaired children will benefit from maximal interactions with the normally-hearing society. Social and educational interactions are desirable pedagogical techniques.

4. The education of hearing impaired children can begin as early as infancy, or at any time the deafness is detected.

5. An educational program for hearing impaired children requires intensive parent education and parental involvement.

6. An educational program for hearing impaired children must be based on the child's participation in numerous life-experiences in order to compensate for the sensory deprivation of deafness. Therefore, classroom and curriculum design must provide for learning through experience.

Elem. Unit (cont.)

7. Many environmental experiences which provide for incidental learning in normally hearing children must be provided for within the school and classroom setting to compensate for the sensory deprivation of deafness. The educational program must intensify the scope and variety of sensory inputs during the teaching-learning process.

8. The educational program for hearing impaired children should extend beyond the classroom into the home and the community to provide guided learning experiences.

9. An educational program for hearing impaired individuals requires ongoing and multi-disciplinary educational evaluation, with individualized educational services supplementing classroom instruction.

10. Specialized provisions are required for the education of many deaf individuals through high school and adult levels.

11. Hearing impaired children with associated learning, behavior or physical problems require more individualized and varied educational approaches than deaf children without such problems.

12. Admission of hearing impaired children with associated problems must be based on a comprehensive educational evaluation.

13. Hearing impaired children who may be designated as "trainable retarded", "psychotic", or "severely physically handicapped" can be more effectively managed in a setting equipped to deal with the other handicap provided a teacher of the deaf is assigned to such a setting and continuous consultation of the Horace Mann Center evaluation team is available.

Activities:

1. In the Horace Mann or Satellite Classrooms:

- a. Children will participate in group learning activities, seated in a semi-circle facing the teacher and blackboard or projection screen. Sometimes children will need writing surfaces, other times they will not.

- b. Children will participate in group activities such as informal dramatization and physical action in an open area.
  - c. Children will engage in independent study at study desks. Teachers will help children with individual learning at their desks.
  - d. Children will engage in reading and research in a library corner. Children may discuss their work seated around a table.
  - e. Children will engage in science, social studies and crafts projects at work tables and will display their work over a period of time. They may leave work partially finished until another day.
  - f. Children will receive individual tutoring from the teacher, teacher-aide, or clinical teacher in an individual, acoustically treated booth.
  - g. Children will use self-teaching audio-visual aids.
2. In adjacent elementary school for normally hearing children:
- a. Participate with normally hearing children in playground, gymnasium or other recreational activities, lunch programs, assemblies, household arts, fine arts, or other non-academic programs.
  - b. Participate in academic activities of regular classrooms according to his readiness and ability.
3. In the home and community:
- Participate in home and community recreational, cultural and social activities with parents, siblings and friends, guided as necessary by appropriate staff of the Horace Mann School.
4. In the Evaluation Unit:
- Utilize the evaluation and individualized services unit as required to supplement programs in the Horace Mann School or satellite classes.

Personnel:

Principal  
Assistant Principal  
Supervising Teacher for Primary Grades  
" " " Intermediate Grades  
" " " Upper Grades  
" " " Classes with Associated Problems  
Teachers of the Deaf  
Teachers of Hearing Impaired Children with Associated Problems  
Teacher-Aides (one for each classroom)  
Guidance Counselor  
Secretaries, Clerks  
Custodians

Personnel who may function in Horace Mann School and Adjacent Elementary School Programs:

Instructional Media Specialist and Assistants  
Electronic Equipment Specialist  
Librarian and Assistants  
Physical Education Teacher  
Industrial Arts Teacher  
Home Economics Teacher  
Art Teacher

Note: Among the teachers and supervising teachers should be at least one person with specialized competencies in each of the following areas:

Language Development and Language Arts  
Communicative Skills (Speech, Auditory Training)  
Reading (Developmental and Remedial)  
Mathematics  
Science  
Social Studies  
Curriculum Development

Facilities:

Offices

Classrooms with areas for:

Group Teaching - seated  
Group Mobile Activities  
Individual Study  
Construction Projects and Displays  
Library Corner  
Individual Tutoring  
Self-teaching Audio-visual Materials  
Storage

Lavatories for each primary and intermediate grades classroom

Men's and Ladies' Rooms for Upper Grades Area of School

Centralized area of individual tutoring and counseling rooms for individualized services to children in the school.

Special considerations in classroom and building design.†These considerations apply equally to all other units of the Center:

1. Acoustical treatment. Absorption of sound by walls, floors and ceilings is essential. All ceilings must be of acoustical tile, floors must be carpeted, walls must be acoustically treated.
2. Reduction of outside noises is essential and building construction must provide for elimination of outside noises.
3. Air conditioning is indicated because of the acoustical requirements listed above.
4. Wiring should be provided for closed circuit television in all classrooms.

5. Amplification equipment permitting high gain, undistorted amplification of sound as well as freedom of movement by each child and teacher should be designed and installed.
6. Control of artificial and natural lighting must permit well lighted classrooms, free from glare at all times.
7. Provision should be made for projection of films, slides, etc. with daylight screens and control of lights in one area without affecting lighting of other classroom areas.
8. Storage areas should be designed throughout the classrooms for convenient access and re-storage of teaching materials. Special designs will be required for each type of material to be stored.

### Shared Facilities Unit

The Horace Mann School and the Adjacent Elementary School may share several facilities, not only because of the reduced mutual need for these facilities and because of the substantial financial saving of construction costs, but because activities within these facilities can be carried on jointly by normally hearing and hearing impaired children, contributing to the basic objectives of interactions among the children. In addition, some of the facilities may be used for community adult education and recreational programs.

The material presented is preliminary because final planning must be conducted cooperatively with the planning staff for the proposed adjacent elementary school.

**Library and Media Center.** Facilities involving children's and teachers' use of books and other instructional media (including the usual audio-visual materials) should be centralized and coordinated. Provisions are needed for flexible use of books and media by both children and their teachers in the center and in the classrooms. Facilities must include provisions for the preparation of original materials.

Note: Among those contributing suggestions for library services was a group of graduate students in the School Library program of the Boston University School of Education under the direction of Dr. Lorraine Tolman.

**Areas required:**

- Circulation desk area
- Reference area
- Display area
- Book and recordings racks
- Shelves for books, film strips, tape recordings, etc.
- Informal reading area
- Study areas with both tables and desks
- Story telling area
- Listening room and booths
- Viewing room (TV and Film)
- Conference room for classes or staff
- Materials preparation areas
- Studio for preparing films, recordings and video tapes
- Equipment laboratory and repair
- Dial-access storage and retrieval area for providing films, video tapes and tape recordings to classrooms
- Offices and Storage

**Checklist - Newer Media In Schools For the Deaf**  
Prepared by Dr. Raymond Wyman, New England Regional Media Center for  
the Deaf, University of Massachusetts.

1. In each classroom:
  - Duplex outlet in front of room, 10 amps
  - Duplex outlet in back of room, 10 amps
  - Anti-keystone 60x60 mat wall screen
  - Light control over screen area on switch near teacher
  - Acoustic treatment on ceiling and floor
  - Auditory training unit, wireless preferred
  - Overhead projector on low (16-18 inch) stand or built-in desk
  - Glare control for sunlight
  - Light control for projection (to 1/10 foot candles)
  - Artificial lighting, 30 foot candles minimum
  - No skylights or clerestory lighting
  - Sink, counter, water fountain
  - 40" projection stand
  - Remote control filmstrip projector
  - 8mm cartridge projector with stop motion
2. Movable Equipment Near Each Classroom (One of each for each 4 classrooms)
  - Language Master with set of earphones
  - 16mm sound movie projector on wheeled projection stand
  - 50x50 portable beaded screen
  - Tape recorder and 8 sets earphones
  - Record player and 8 sets earphones
  - Automatic 2x2 slide projector
  - 8mm rear screen projector, silent
  - 8mm rear screen projector, sound
3. Instructional Materials or Audiovisual Center
  - Location near to or part of Library
  - Sink and formica top work area
  - Large paper cutter, 30x30
  - Small paper cutter, 12x12
  - Two 11x14 enamel photo trays
  - 8mm camera
  - 35mm SLR camera and copy stand with lights
  - Polaroid camera
  - Diazo transparency making machine
  - Thermol copy machine
  - Photocopy transparency making machine
  - Transparency local production kit (lettering devices, etc.)
  - Dry mounting press
  - Laminating and color lift machine
  - Repair area for hearing aids and AV equipment (VTVM, VON, tools, etc.)
4. Media Library
  - Masters for local transparency production
  - Overhead transparencies
  - 2x2 slides
  - 35mm filmstrips
  - 16mm films
  - Mounted study prints
  - 8mm cartridges, sound and silent
  - Professional books and magazines on media production and utilization

**Art Education Laboratory. Areas required include:**

- Primary instruction area with work tables
- Upper instruction area with tilt sections on drawing tables
- Studio easels areas
- Semi-circular instructional area with blackboard and projection screen
- Display areas
- Ceramic area including mobile construction tables, kiln, painting and drying areas
- Sink
- Teacher's desk and conference area
- Storage bins, closets, shelves, etc. (Ample storage required)

**Physical Education and Recreation Programs.**

Physical education and recreation programs are designed to aid in the development of the whole child: physically, socially, emotionally as well as to contribute to intellectual insights and knowledge. The skills children learn, early in life, establish the base and pattern for their use of leisure both at the time of learning as well as during their adolescent and adult life.

**Indoor areas:**

- Gymnasium, locker rooms and showers
- Swimming pool
- Music room and instrument storage
- Crafts room for wood, metal and leather working
- Kitchen
- Game room for ping-pong, shuffle board, etc.
- Greenhouse
- Multi-purpose club rooms for meetings, games, etc.
- Room for boxing, wrestling and weights
- First-Aid health room
- Dark room for photography
- Recreational reading room (may be in library area)
- Drop-in Teen Center
- Social Lounge
- Check room, rest rooms
- Maintenance areas

**Outdoor areas:**

- Hardsurface area
- Athletic field
- Parking area
- Children's outdoor apparatus play area
- Handball court
- Tennis court
- Outdoor basketball court
- Outdoor recreation area for adult's summer lounging
- Roofed area for play in inclement weather
- Cook-out picnic area
- Floodlighting required for evening activities
- Stage of Auditorium could open onto outdoor area as outdoor theater

Home Economics: Areas and facilities are required for instruction and activities in household arts and family living. Suggested areas are:

**Food preparation area:**

Four complete kitchen units arranged in square so that teacher can turn from one group to another for ease in visual demonstration and lipreading. Each kitchen unit should have equipment for preparing, cooking, refrigerating and serving food. Each unit should also contain a dining table and four chairs.

**Dining area:**

For teas and luncheons for children, staff, parents and other groups. Students may assist in food preparation and serving. Movable decorative screen or folding door should separate dining area from food preparation area.

**Teaching area:**

Semi-circular arrangement of chairs with blackboard, easel, projection screen and materials storage.

**Sewing Laboratory:**

A large open room with good lighting and numerous electrical outlets. Movable equipment - sewing machines, cutting and sewing tables, etc.

Pre-vocational education. Pre-vocational education in an elementary school for the deaf can provide activities for all deaf children which will enhance language and communication skills as well as provide them with a knowledge of the vocational opportunities of the community. It can also provide instruction in basic skills related to future vocational education in the comprehensive high school, a vocational school, or on-the-job training. Many of the skills and knowledges of a pre-vocational education program can be developed in regular classrooms. Special areas are required for experience with various occupational opportunities and for the development of certain basic competencies.

**Activity areas or rooms:**

Wood-working shop area

Machine shop area

Electronics area

Typing and business machines area

Areas for other specializations to be designated

Areas for rotating exhibits and activities with equipment and materials from cooperating business and industries.

Traffic Flow. Careful attention must be given to traffic patterns in the design of the shared facilities unit, since children, parents, adults and staff of both schools and the community will make constant use of the facilities for varying periods of time during every day.

Other required areas:

Cafeteria

Auditorium, stage, workrooms

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## The Secondary Education Unit

### Objectives:

1. To provide the opportunity for deaf high school pupils to enroll in regular classes with their hearing peers in a comprehensive high school offering a variety of curricula - general, business, college, vocational.
2. To provide specialized instruction for deaf pupils in the English Language Arts in the new comprehensive high school (to be built in Boston).
3. To provide supplemental tutoring for deaf high school pupils enrolled in various courses within the curricula of a comprehensive high school.
4. To provide specialized guidance and counseling services for deaf high school pupils which will assist them in psycho-social adjustments in the high school and community and assist them in planning for post-secondary educational and vocational placement.

### Assumptions:

1. A proportion of deaf pupils graduating from an elementary school for the deaf are able to enroll in regular high school programs with little, if any, need for specialized services. Such pupils will have developed good oral-aural communicative skills and reading, writing and study skills.
2. The majority of deaf pupils graduating from an elementary school for the deaf can be enrolled in a variety of courses in a comprehensive high school if they:
  - a. Are enrolled in a special section of English Language Arts taught by a teacher of the deaf, and which emphasizes reading, writing and study skills.
  - b. Receive supplemental instruction in academic subjects from a teacher of the deaf who coordinates the program with the academic subject matter teachers.

Sec. Ed. (cont.)

- c. Receive intensive guidance and counseling in psycho-social adjustment.
3. Deaf high school pupils enrolled in this above program have achieved minimal proficiency in oral-aural communicative skills.
4. Some deaf pupils in a comprehensive high school may require some of the services of the evaluation and individualized services unit.
5. The teacher of English Language Arts for the Deaf will have appropriate training and experience in both secondary-level English teaching and the teaching of the deaf.
6. A guidance counselor will have appropriate training in the counseling and education of the deaf.
7. Teachers of the deaf and counselors will maintain contact with all teachers of other courses in which deaf pupils are enrolled.

Pupil's Activities:

1. In the Comprehensive High School:
  - a. Be enrolled as a pupil of the high school with all privileges and responsibilities of any regular pupil.
  - b. Be enrolled in a home room with hearing peers, or in a home room with other deaf pupils, as determined in each individual case.
  - c. Be enrolled in a special English Language Arts class in an especially equipped classroom taught by a teacher of the deaf.
  - d. Attend classes in appropriate courses with hearing peers.
  - e. Receive tutoring in academic subjects in a special classroom from a teacher of the deaf.
  - f. Participate in as many curricular and extra-curricular activities with his hearing peers as individual ability and interest indicates.
  - g. Avail himself of a counselor for any necessary assistance with psycho-social problems and post-secondary or educational planning.
2. In the special classroom:
  - a. Participate in a variety of English Language Arts activities

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in a group situation with other pupils and the teacher - reading, discussions, dramatizations, etc.

- b. Undertake independent reading and writing activities.
  - c. Engage in independent study of academic subjects with the assistance of the teacher.
  - d. Undertake independent learning through use of various audio-visual materials - films, filmstrips, recordings, tapes, etc., as appropriate according to the amount of residual hearing.
  - e. Utilize an appropriate type of wireless amplification equipment for maximal use of residual hearing, such as, his own hearing aid, with or without induction loop system, or wireless headsets (such as EFI).
3. In the Horace Mann Center:
- a. Receive whatever supplemental tutoring, counseling, or individualized services are required but not available in the comprehensive high school.
  - b. Utilize, as appropriate, any of the materials, equipment and activities provided for pre-vocational educational program.
  - c. Participate, as desired, in any social-recreational program arranged for deaf high school pupils and their hearing friends.
4. In the Community:

Participate in community activities with the assistance of a counselor, if this assistance is necessary.

Personnel:

1. A teacher of the deaf for each special classroom within a comprehensive high school.
2. A counselor for each 12-15 deaf pupils enrolled in the secondary program.
3. All personnel in the Evaluation and Individualized Services Unit as required in individual cases.

Facilities:

It is recommended that four classrooms of the type outlined below be constructed in the Horace Mann School for use by secondary pupils who need supplemental services outside of the comprehensive high

Sec. Ed. (cont.)

school and for use in the Adult Education Program. Four special classrooms and offices in the comprehensive high school should be similarly arranged and equipped.

Areas of Classroom:

1. Teaching area - Teacher's table with overhead projector. Blackboard, screen, bulletin board display areas. Amplifying equipment for audio-system. Wireless audio-system for pupils (own hearing aid, induction loop, or radio system). Movable tables and chairs for pupils. Tables to be arranged in semi-circles, as conference table, or stacked to permit an open area for dramatization.
2. Individual tutoring booth (similar to that designed for elementary school classrooms).
3. Individual study booths for pupils to undertake independent study, but with opportunity for teacher assistance, and for use of self-teaching audio-visual materials- Film Strips, Slides, Mark IV 8mm. cartridges, Sound Films, Video-taped materials, etc.
4. Storage areas for pupils, teachers, designed for compact storage and easy access and appropriate for the specific type of material to be stored.
5. Individual offices for each teacher and counselor, including provision for private conferences with students.

The Adult Education Unit

Objectives:

1. To provide a continuing educational program for deaf adults including:
  - a. Instruction in the English Language Arts with emphasis on reading and writing skills.
  - b. Remedial instruction in basic skills (study skills, mathematical skills).
  - c. Opportunity for continuing refinement of communicative skills.
  - d. Pre-vocational evaluation and training.
2. To encourage deaf adults to utilize programs of the Adult Schools and Centers conducted by the Boston School Department of Adult Educational and Recreational Activities and other cities and towns.
3. To provide guidance, counseling, and supplemental tutoring for deaf adults enrolled in adult recreational and educational programs.
4. To promote community interaction with deaf adults through education of the community.
5. To provide an assessment program through the Evaluation Unit.
6. To provide guidance, counseling and supplemental tutoring for deaf college students enrolled in colleges and universities.  
(A pilot project has been proposed for 1967-68 by Northeastern University. The facilities of the Horace Mann Center could be made available for this program in the future, if desired.)
7. To provide counseling services in relation to psycho-social problems.
8. To provide a social-recreational program within the Horace Mann Center for deaf adults who wish such a program. To encourage community participation in the social-recreational program.
9. To provide coordinated services related to vocational evaluation, vocational education, and vocational counseling in cooperation with

Adult Ed. (cont.)

the Vocational Rehabilitation Program for the Deaf (an extension of the current VRA sponsored Adult Deaf Project-Noyes Rehabilitation Center.)

Assumptions:

1. Deaf adults will be interested in a wide range of courses and activities in educational and recreational programs.
2. Deaf adults will participate in an adult educational and recreational program that is planned to meet their special needs.
3. Some deaf adults will not have completed a high school program and will be interested in an educational program leading to a high school diploma.
4. Deaf adults will require counseling and tutoring services to assist them in utilizing existing and applicable adult educational and recreational programs conducted in school and community centers.
5. Some deaf adults will have psycho-social and vocational problems requiring counseling services from personnel (counselors, psychologists, psychiatrists) who understand the problems of deafness and who can establish a communicative relationship with deaf individuals.
6. Some deaf adults will be more proficient in manual systems of communication (signs and finger spelling) than they will be in oral communication and lipreading skills. Deaf adults will communicate by any system they choose. The use of manual communication by certain staff members of the adult program will be necessitated.
7. Deaf adults will utilize the services of the evaluation unit according to their individual needs.
8. A sense of identity with the adult program of the Horace Mann Center by deaf adults will be enhanced by the employment of deaf teachers and counselors in the program.

Adult Ed. (cont.)

9. Deaf adult groups would utilize the facilities of the New Horace Mann Center if they participated in the planning, and conduct social and recreational programs.

Activities of the Adults:

1. In the Horace Mann Center:

- a. Attend classes in English Language Arts
- b. Receive tutoring in classrooms and in individualized services unit.
- c. Utilize counseling services.
- d. Utilize facilities and program for pre-vocational evaluation and education (see sections on pre-vocational educational program).
- e. Receive assistance in refining communicative skills in individual and group sessions.
- f. Attend classes in academic subjects when and if unable to utilize programs in adult education centers with hearing adults.
- g. Utilize services of evaluation unit as needed.
- h. Participate in social, physical educational and recreational programs. (See section on recreation for available activities.)

2. In the Community:

Utilize the assistance of Horace Mann Center counselors and teachers as an aid to participation in any community educational, recreational, or rehabilitation programs of interest.

Personnel:

1. Counselor(s) - May be same individuals who function as counselors in other programs of the Center, but should have training in counseling deaf adults.
2. Teacher(s) - of the deaf for English Language Arts course. Each teacher should be a specialist in reading, writing and study skills, have a knowledge of speech and hearing therapy procedures for deaf adults, and have ability to use manual communication as a supplement to oral communication.
3. Teachers of academic subjects when a group of deaf adults who are

Adult Ed. (cont.)

unable to attend regular adult centers desire a course in a specific subject. If manual communication of subject matter is necessary, and the teacher does not communicate manually, an interpreter will be needed.

4. All personnel in the Evaluation and Individualized Services Unit as required.
5. Coordinator of Adult Program.
6. Personnel of Physical Education and Recreation Program.
7. Social Director.

Facilities:

The major portion of the adult program will be carried on in facilities recommended for other units, such as secondary unit classrooms, pre-vocational program areas, and physical education and recreation facilities. In addition, the following will be required for the adult program:

An office for the coordinator of the program.

Offices for teachers, counselors, recreation and social directors.

Preparation of Professional Personnel

Objectives:

1. To provide opportunities for students from various professional preparation programs to observe all the types of activities in the Center and School.
2. To provide practicum opportunities for students enrolled in professional preparation programs.

Example: Teachers of the Deaf - - - - Boston University  
 Teachers of Deaf-Blind - - Boston College  
 Speech Pathologists - Audiologists-  
 Boston University  
 Emerson College  
 Northeastern University  
 University of Massachusetts  
 Nursery Teachers - - - - - Tufts University  
 Wheelock College  
 Rehabilitation Counselors - Boston University  
 Northeastern University  
 Rehabilitation Administrators-  
 Boston University  
 Northeastern University  
 Multiply Handicapped - - - - Boston University  
 Boston College

3. To provide in-service training for personnel of the Center and School.
4. To provide for training of supplemental personnel who may require knowledge of the problems of auditory dysfunction such as Psychologists, Social Workers, Psychiatrists.

Assumptions:

1. A publicly supported center should provide opportunities for all appropriate professional personnel from any educational institution to engage in observation and practicum as part of their professional preparation.
2. In-service training contributes to the continued professional development of the staff.

Prep. of Prof. Pers. (cont.)

Activities:

1. Students and supervisors will observe activities of staff, children and adults in the Center and School.
2. Students, under supervision of staff and University faculty members, will engage in practicum activities such as teaching, therapy, tutoring, counseling and evaluation.
3. Students will undertake preparation of teaching or counseling sessions, including preparation of materials, in a study area.
4. Students will participate in staffing and self-evaluation conferences with Center staff and University faculty members.

Personnel:

Coordinator of Professional Preparation  
Supervisors of Student Training in various areas or units.  
Supervisors from affiliated Universities  
Secretary

Facilities:

1. Observation rooms adjacent to selected classrooms and tutoring-counseling rooms.
  2. Classroom for group conferences and instruction of students.
  3. Closed circuit television with camera outlets in each room, TV monitors in group classroom, and provisions for video-taping.
  4. Office for Coordinator.
  5. Office with desks for supervisors from affiliated Universities.
  6. Conference room for meetings with small groups of students.
  7. Study room for students assigned for practicum.
- Lockers for each student.  
Study tables and chairs.

Research Program

Objectives:

1. To conduct research related to problems of learning, behavior and communicative skills of individuals with auditory dysfunction.
2. To conduct research related to educational methodology for individuals with auditory dysfunction.

Assumptions:

1. Research is a necessary component of a comprehensive educational program.
2. Issues and problems in the education of individuals with auditory dysfunction require research as one approach to their solution.
3. A comprehensive school and center can provide the population for ongoing research.
4. Research projects can be funded from several sources, by submission of research proposals.

Activities:

1. Research workers may carry on a considerable portion of research activities in conjunction with the normal educational activities of the school and center in classrooms and evaluation rooms.
2. Children and adults enrolled in the school and center may participate in research projects in their classrooms.
3. Certain research activities will require special facilities for controlled studies.
4. Researchers may engage in research activities with a variety of data obtained from case records, tape recordings, etc.

Research (cont.)

Personnel:

Coordinator of Research.

Secretary.

Research Assistants and Associates as required by specific projects.

Consultants as required.

Facilities:

1. Office of Coordinator.
2. Secretarial Office and Records Room.
3. Research Laboratory for equipment as required by specific projects.
4. Psycho-acoustic Testing Suite - Two-room double-walled sound controlled rooms.
5. Conference Room.
6. Office-work area for Research Associates.
7. Room for data calculation and data processions equipment.

## V. AREAS REQUIRING FURTHER PLANNING

### Enrollments and Size of Facility

Estimates of the population of hearing impaired individuals who would seek services at the new Center have been difficult to make because data on the incidence of auditory disorders is meagre, even on a national scale.

One factor making prediction of the demand for services difficult is the current policy of the State of Massachusetts which permits parents to select the school a child may attend, provided the child qualifies for admission. Thus, a parent may take a child to any or all of the four schools for the deaf for evaluation. If the child qualifies for admission in all four schools the parent makes the final decision as to which school the child attends. Three of the schools are in eastern Massachusetts. If the child is a day school pupil, and qualifies for admission to all three schools, the parent's decision can be made without regard to geographical location of the school attended in relation to the child's residence. Currently, children are being transported at State expense, by taxi, to schools which are not nearest to children's homes. Under the circumstances, this policy makes determination of the demand for services in a new Center, and predictions on number of classrooms and facilities needed for any particular program, extremely difficult.

Another factor complicating the situation of enrollments and class size is the maternal rubella epidemic of 1963, 1964 and 1965. Present estimates indicate a substantial increase in the number of deaf children with associated learning, behavior and physical problems. The survey begun during this project, the pilot operational project, and new legislation being filed by Senator Kevin Harrington to create a panel to recommend a comprehensive state-wide program will provide some data.

On the basis of present information and estimates, the number of classrooms for each unit can be suggested as follows:

- Evaluation Unit - two classrooms
- Nursery-Kindergarten Unit -
  - Four nursery classrooms (two for each age level)
  - Two kindergarten classrooms
- Elementary School Unit -
  - Sixteen classrooms (two each for grades 1-8)
  - Six classrooms for children with associated learning and behavior problems
- Secondary-Adult Units - four classrooms

No attempt has been made to indicate the physical size of any areas or classrooms. It is felt that this information must be developed in consultation with the architect.

Cooperative Planning of Adjacent  
Elementary School

Planning of the adjacent elementary school should be undertaken cooperatively, with involvement of the Horace Mann Planning Staff. In addition to joint planning of the shared facilities, there should be joint planning of curriculum. Since hearing impaired children may spend portions of each day in a regular classroom, the consultants conference recommended that class size in the adjacent elementary school be reduced to accommodate the hearing impaired children and provide appropriate instruction. A class size of 23 normally hearing children was recommended.

Costs and Funding

Costs and specific sources of funding remain to be determined. The following list potential sources of funds for facilities, staff and equipment.

Current funding: At present the entire cost of operation of the Horace Mann School for the Deaf is reimbursed to the City of Boston by the State Bureau of Special Education. It is assumed that a proportionately increased amount of funds will be available for the expanded program.

Public Law 89-313, an amendment to the Elementary and Secondary Education Act of 1965, provides a yearly amount per pupil based on average daily attendance for special programs (staff and equipment). These funds can be allocated to specifically designated features of the proposed program in the new facility.

Massachusetts Senate Bill 124, currently filed by Senator Kevin Harrington, provides for the establishment and operation of a Horace Mann Center for Communicative Disorders, to be financed by state, federal and private funds and operated by the City of Boston. It is assumed that State funds will be appropriated as required in order to qualify for Federal funds.

Title II of Public Law 89-10 provides funds for School Library Resources, Textbooks and Instructional Materials. An appropriate proportion of these funds allocated to the State of Massachusetts and the City of Boston should be assigned to the needs of the Horace Mann Center.

The Hill-Burton Act provides funds for construction of clinical facilities. Exploration should be made of the possibility of allocating a portion of Massachusetts Hill-Burton funds for construction of portions of the Evaluation and Individualized Services Unit, especially those facilities in which the health services are provided.

Captioned Films for the Deaf, amended in PL 89-258, can provide continuing support through the loan of equipment and teaching materials.

Title III, ESEA, provides funds for supplemental centers and innovative programs. Funds for a pilot project related to the Evaluation Unit have been requested for three years, 1967-1970. Equipment requested for this project can be moved to the new facility. Application can be made for support of new features, including construction where necessary, depending upon the amount of funds appropriated by Congress.

Public Law 89-750 involves amendments to the Elementary and Secondary Education Act. Title VI provides for expanded programs for the education of Handicapped Children. Section 604 provides funds for construction where necessary.

Part D provides increased funds for cooperative research activities for the handicapped. Section 141 provides funds for research training, and may be applied for in relation to the proposed research section of the new facility. Section 143 provides for the construction of research facilities, so that it should be possible to seek funds from this source for the research section of the facility.

Public Law 89-105 provides for increased funds for the Research and Demonstration Programs with the handicapped. Some features of the program proposed for the new Center might be funded as research or demonstration projects.

Public Law 89-750, "Adult Education Act of 1966". Certain portions of the proposed adult education program of the Horace Mann Center should qualify for funding under the provisions of this act. (Primarily staffing-no mention of construction). The above act is an amendment to PL 88-452 - Adult Basic Education.

The Higher Education Act, PL 89-329, and the Higher Education Facilities Act, PL 89-752, may have provisions whereby a University could receive funds to provide a Community Service. One possibility is for Boston University to receive funds for the Educational Evaluation and Individualized Services Unit. Another possibility would be that Northeastern University could receive funds to provide the Counseling Services for the College Deaf population as a continuation of its current research program and proposed pilot program.

The Vocational Education Act of 1963, PL 88-210, may be a possible source of funds for certain aspects of the program. A conference with Boyce Williams of VRA indicates the VRA support might be available on a matching fund basis for initial staffing for 4 years, 3 months, (reduction of Federal support from 75% to 30%) and for several aspects of the

program including some new construction under PL 89-333, Vocational Rehabilitation Act Amendments of 1965.

The Public Health Service has been supporting a variety of research projects, preparation of personnel, and service programs in relation to the field of Communicative Disorders. The possibility of funding for certain aspects of the Horace Mann Center for Communicative Disorders should be explored, such as:

The Neurological and Sensory Diseases Service Program.

Public Law 89-749 - Comprehensive Health Planning and Public Health Services Amendment.

Public Law 89-751 - Allied Health Professions Personnel Training.

Research proposals may be submitted to the Communicative Disorders Study Section of the National Institutes.

Fellowships for personnel being prepared in the colleges and universities of the Boston area who utilize the Center are already available through several U.S. Office of Education and Vocational Rehabilitation Administration Programs.

The possibility of support for certain aspects of the Nursery-Parent Education program and of the Evaluation and Individualized Services Unit by the Children's Bureau should be explored.

PL 85-926, Mental Retardation Facilities and Construction Act should be explored to determine if funds could be allocated for the Multiply-Handicapped Unit.

The possibility of receiving grants from such private funds as the Phillips Foundation, the Speech and Hearing Foundation and the United Community Fund should be explored.

#### Administrative Structure

Since the recommended scope of the new Center is broader and more complex than that of a typical school, consideration must be given to the organizational and administrative structure. In this connection, it is important to recognize that the Center will function essentially as a State-supported program administered by the Boston School Department, providing for the needs of a wide variety of auditory disorders on a regional and, in part, state-wide basis.

The major unit of the Center is the Horace Mann School for the Deaf, which can continue on an expanded basis under the usual organization of a school. Since many of the functions and personnel of the new programs have not existed in the past, it is probable that a new pattern will have to be

designed. The needs of persons with auditory disorders suggest that a unified administrative structure, closely allied to the Horace Mann School for the Deaf, is required.

Some of the recommended satellite classes should probably be located in suburban towns and cities, but should be coordinated through the Horace Mann Center to maintain quality of educational services through supervision from the Center staff and access to all the resources of the Center. Administrative structures should permit cooperative development of satellite classes by the Center in suburban towns.

The administrative structure should permit responsiveness to the needs for new personnel to work with deaf individuals. Since State funds provide reimbursement for all costs, it is necessary to be able to make requests for new personnel according to demands for service. In 1966-67, some of the needs and demands, due in part to the German Measles epidemic with a tripling of demand for the nursery program, and some needs identified by the planning project, such as immediate need for a secondary education program, could not be anticipated at the time when budget requests were called for on October 1, 1966. Since the Horace Mann School's responsibilities are to the day students from the entire eastern portion of the State, the needs for additional personnel should not be dependent upon the budget of the City of Boston Public Schools alone. A flexible administrative structure, responsive to the changing needs of the State, is necessary.

#### Recruiting and Hiring of Personnel

Until recently, it has been difficult to recruit teachers for the Horace Mann School for the Deaf. The poor image of the school and the area in which it has been located, the lack of new and expanding programs prior to the present planning project, the lack of supervisory personnel for newly trained teachers being recruited and the necessity of going through the examination procedures for positions in the City of Boston Schools have all been factors

in discouraging teachers from applying for positions. Some of these factors are being changed. However, it is necessary to scrutinize the requirement of teachers' examinations in relation to the needs of the Horace Mann School.

The Boston Schools are to be congratulated on the efficiency with which examinations were administered, graded and lists approved by the School Committee in 1967. However, the efficiency exercised this year did not result in a procedure that would secure the most qualified teachers for the positions available.

We assume that the examinations are designed to produce the most qualified teachers. Since the first examination each year is given in December, we must also assume that experienced teachers, currently employed, would be taking examinations in December. Such is not the case. The majority of individuals seeking to take the examinations are current graduate students in training who would fail any valid examination given in December. Thus, the examination was given in March to permit newly trained teachers to have some type of preparation. Because of the awareness of the potential for a new Horace Mann School, a larger number of candidates reluctantly registered for and took the examination in March, 1967. However, when the list was released it was obvious that the most qualified persons for the authorized vacancies in May, 1967, were not at the top of the list, and might not be offered the positions. In addition, half of those taking the examination in March had already accepted other positions by the time the list of approved candidates was announced.

In order for teachers to be considered for the Horace Mann School for the Deaf, they must be trained teachers of the deaf. They must qualify for certification as teachers of the deaf according to the certification requirements of the State Department of Education. The graduates of teacher-training programs are in programs that meet the certification requirements of the Commonwealth of Massachusetts and the Conference of Executives of

American Schools for the Deaf. It is the opinion of the Horace Mann Project Staff that these certification procedures, and the fact that all applicants are receiving degrees from special education programs of accredited Universities guarantee at least minimum quality of preparation. The critical factors in determining the most qualified individuals are those personal and professional qualities which can best be determined by interviews with the staff of the Horace Mann School for the Deaf and from letters of recommendation from an applicant's professors and supervisors. It is therefore recommended that some modification of the system of examinations be used for teachers of the deaf, with authority for recommendations for hiring resting with the Principal of the Horace Mann School. Such authority should also be delegated to the administrator of the new Center for personnel in other units of the Center in the future.

The following recommendations are based on discussions in both conferences of consultants:

Examinations can be held twice yearly at the usual time at which City of Boston examinations are held. However, two forms of the examination should be prepared for the December period - one exam for students currently enrolled in teacher preparation programs and one for teachers who have completed the program and usually have some teaching experience.

Eligibility for the examination should be based on enrollment in, or completion of an accredited teacher preparation program and eligibility for certification by the Massachusetts State Department of Education.

Interviews administered through the Board of Examiners should be conducted by the Principal and Assistant Principal of the Horace Mann School for the Deaf. Final decision of the place of an application on the list of qualified candidates shall be made in consultation with the Principal of the Horace Mann School for the Deaf.

Separate lists should be prepared for nursery-kindergarten, elementary and secondary level appointments to insure that teachers are qualified for the level at which they will teach. Decisions should be made by the Principal of the Horace Mann School.

In the event that no qualified candidates are on the list and a vacancy occurs, the Principal shall be authorized to interview and recommend persons to fill the vacancy. Such an appointment should be at the regular salary of a fully appointed teacher for one year. Reappointment

will depend upon successful passing of the examination at the next regular administration of such examinations.

Consideration must also be given to criteria for hiring personnel in the new Center for whom job descriptions and titles do not exist at present.

The Principal of the Horace Mann School should be authorized to undertake a program of recruiting of personnel with funds allowed for travel to interview candidates. Most schools for the deaf provide such funds.

#### Recruiting for Professional Training

Boston University currently conducts a cooperative program with the Boston School for the Deaf to prepare teachers of the deaf. Compared to other areas of special education, the number of students applying for admission to graduate study is quite low. Federal funds are available for graduate fellowships. The number of fellowships is proportionately larger in the area of the deaf than other areas of special education, but the number of applications is considerably less. In the area of speech and hearing impaired, the number of fellowships available is one for every five qualified candidates. In the area of the deaf, as of May 15, 1967, there were only enough qualified and accepted candidates for the fellowships allocated for 1967-68. A program to recruit graduate students to seek training as teachers of the deaf is needed, and should be undertaken as part of the program of a comprehensive school and center for auditory disorders. Included in recruiting activities should be a focus on teachers of children with associated learning and behavior disorders. Such teachers need preparation in the broad area of special education as well as in the area of deafness.

Recruiting for professional training should also encompass all non-teaching personnel as well. Rehabilitation counselors, psychologists, audiologists, social workers, need to include some training in the area of communicative disorders to function effectively in the Horace Mann Center.

The Problem of Residential Facilities

The recommendation for a day school program does not provide for deaf children from some areas that are not within commuting distance of Boston. There are two new features of the recommended program which do not exist, nor are they apparently contemplated by the three Massachusetts schools for the deaf with residential facilities. These new features are the secondary school program and the program for deaf children with multiple problems. Thus, there will be deaf children of secondary school age, and multiply-handicapped deaf children who will be unable to take advantage of the new Horace Mann program because they live too far from the Center to be transported daily. It is therefore necessary to consider some alternative solutions; such as:

- a. Development of small dormitories near the Horace Mann Center through rental or purchase of nearby homes or apartments or the construction of small dormitories.
- b. Consideration of the possibility of an additional facility in another portion of the state that would operate on a residential as well as a day school.
- c. Continued use of residential facilities in nearby states.

The Problem of Non-aural Systems of Communication

The recommended program for the Horace Mann Center will use an aural-oral approach. While some children educated by this approach have failed to achieve adequacy in oral communication skills in the past, it is expected that the recommended program, with its evaluation unit, individualized services and innovative classroom approaches will reduce substantially the number of children who do fail to achieve adequate oral communication. However, it must be assumed that some children attending the new program might fail to achieve adequate oral communicative skills.

Some educators of the deaf believe that a manual system of communication should be provided for such children. If such an approach seems desirable, the philosophy of the Horace Mann Center indicates that a separate

facility might be required. The pilot evaluation project is expected to provide information on children whose progress in developing aural-oral communication skills is less than satisfactory and to indicate a variety of approaches which might be used to develop communicative skills in these children, using whatever means of communication appears appropriate in each individual child. However, the problem needs further study and the Horace Mann Planning Project staff could participate in the exploration of other types of programs, along with other interested persons or institutions. An important feature should be the development of research studies.

In connection with the issues of aural-oral and manual systems of communication, it is recognized that some of the adults in the adult education program for the new Center may prefer manual systems of communication. Such use of these systems of communication by deaf adults in the program of the Center is considered appropriate and not incompatible with the philosophy of the Center.

#### Vocational Rehabilitation of Deaf Adults

A rehabilitation program for deaf adults has been conducted at the Noyes Rehabilitation for Work Center. Recommendations for a regional rehabilitation center for the deaf adults are being made by the Deaf Adult Project Staff. Contacts are being maintained between the above project and the Horace Mann Project in order to plan cooperatively for comprehensive vocational education and vocational rehabilitation programs and facilities for deaf adults.

APPENDIXES

## APPENDIX A

Participation by Personnel of the  
School Department of the City of Boston

The Staff of the Horace Mann School for the Deaf.

The teachers of the Horace Mann School for the Deaf were active in discussing problems and proposals and in making recommendations for various phases of the proposed facility. Every teacher had at least one conference with the project director and made helpful suggestions. The following teachers made substantial contributions:

Nursery-Parent Education:	Patricia Cowan Rosalie Gabel Jane Minch
Elementary School Program:	Catherine Cuddy Mary Deveney
Home Economics:	Theresa Connors
Art Education:	Irene Bennett
Associated Problems:	Martha Wahl

Miss Eileen Mahoney, School Nurse and Dr. Alfred Hurst, School Otologist, participated in several conferences pertaining to the Evaluation Unit.

School Department Administrative Personnel.

The following members of the Boston School Department participated in one or more conferences pertaining to the Horace Mann Planning Project:

William H. Ohrenberger - Superintendent  
 William G. Tobin - Deputy Superintendent  
 William J. Cunningham - Associate Superintendent  
 Joseph McKenney - Associate Superintendent  
 William Miller - District Superintendent  
 Richard J. Gorman, M.D., School Health Services  
 Evans Clinchy - Consulting Director, Office of Program Development  
 Herbert Forsell - Coordinator, Title III Projects  
 Robert Murray - Project Director, Comprehensive High School  
 Planning Project  
 Pauline Ehrlich - Department of Speech and Hearing - Lipreading  
 Department  
 Mary Keefe - Conservation of Eyesight Classes  
 Frederick L. Landrigan - Eye Conservation Clinic  
 Anthony Galeota - Chief Structural Engineer  
 Arthur Driscoll - Structural Engineer  
 John A. Tyrell, Jr., - Director, Science Department

## APPENDIX B

State and Community Agencies and Centers**The Advisory Committee on Title III Projects.**

An advisory committee composed of representatives and institutions met to react to the proposals for Title III operational projects including the current project.

Periodic reports pertaining to the Horace Mann Planning Project and its recommendations were made at meetings of the Executive Committee of the Advisory Committee on Title III projects. Members of the Executive Committee were:

Francis Brow, Program Analyst, Office of Program Development  
 Jack R. Childress, Dean, Boston University School of Education  
 Herman Field, Project Director, Tufts-New England Medical Center  
 Frederick Hickler, Affiliated Hospitals Center, Inc.  
 Sister M. Lumena, C.S.J., Archdiocesan School Center  
 Dr. Vincent Nuccio, Assistant to President, Boston College  
 William Pear, Public Facilities Commission  
 Wayne Sherwood, Metropolitan Area Planning Council  
 George B. Thomas, Harvard Graduate School of Education  
 Marc A. Tucker, Institute for Educational Innovation  
 Mrs. Laurie Vanderschmidt, Action for Boston Community Development  
 Joseph Vilimas, Jr., Executive Director, John F. Kennedy Family  
 Service Center  
 Evans Clinchy, Consulting Director, Office of Program Development  
 Herbert G. Forsell, Coordinator, Title III Projects

The following individuals representing state and community agencies participated in one or more conferences with the project staff:

Boston Children's Service Association -  
 Miss Corinne Carr  
 Boston College-  
 Dr. John Eichorn  
 Boston Guild for the Hard of Hearing-  
 Mrs. Claire Kennedy, Executive Director  
 Miss Barbara Harrod  
 Mrs. Anita Mackin  
 Deaf Adult Project - VRA  
 Clifford Lawrence, Project Director  
 Gino Viscovi  
 Emerson College  
 Dr. David Luterman  
 Dr. Charles Klim  
 Joseph P. Kennedy, Jr., Memorial Hospital-  
 Sister M. Dolorita, Administrator  
 Jordan Joseph, M.D., Pediatric-Neurologist  
 Lynn Ryan, Supervisor, Speech and Hearing Department

Massachusetts Department of Health-

Dr. Phillip Johnston

Massachusetts Institute of Technology - Science Camp-

Dr. Warren M. Brodey

New England Regional Media Center for the Deaf-

Dr. Raymond Wyman - University of Massachusetts

Northeastern University-

Dr. Reuben Margolin

Dr. Herbert Goldin

Dr. Robert Ferrullo

Psycho-Social Services for the Deaf-

Dr. Richard Thompson

Speech and Hearing Foundation of Massachusetts-

Mr. and Mrs. Cecil Rose

Mr. James McDonald

Mr. William Garland

Mr. and Mrs. Kimball Nash

Mrs. H.W. Nugent

Mr. Joel Hoff

Mr. John A. Shelton

Mr. Kane Simonian

## APPENDIX C

Personnel of other Massachusetts Schools  
for the Deaf with whom one or more conferences were held per-  
taining to the Project.

Beverly School for the Deaf: William Bragner  
Patricia Quinn

Boston School for the Deaf: Sister Mary Kieran, Principal  
Sister Mary Alacoque  
Sister Mary Laurand  
Sister Mary Carl, former Principal

Clarke School for the Deaf: George Pratt  
Stanford Blish  
Phillip Bellefleur

## APPENDIX D

Consultants and Conferences

## Consultants:

Bertram Berenson, Head, Department of Architecture,  
Hampton Institute

Leo Connor, Superintendent, Lexington School for the Deaf  
Educational Services, Inc., Newton, Massachusetts

Miriam Fiedler, Head Psychologist, Maternal and Infant Health Study,  
Children's Medical Center, Boston

Robert Frisina, Vice-President, Rochester Institute of Technology,  
and Director, National Technical Institute for the Deaf

Richard Kretschmer, Doctoral Fellow, Department of Special Educa-  
tion, Columbia University

Clifford Lawrence, Project Director, Deaf Adult Project,  
VRA - RD - 1576 - S

Allan Leitman, Director of Early Childhood Education Study of  
Education Development Center

Edgar Lowell, Administrator, The John Tracy Clinic

Ann Mulholland, Coordinator, Teacher Preparation Program - Hearing  
Impaired, Teachers College, Columbia Univ.

Lois Odle, Speech Pathologist

Harrie Selznick, Director of Special Education, Baltimore Public  
Schools

Tidewater Design Group, Hampton, Virginia

## Consultants - Faculty of Boston University School of Education-

Jack R. Childress, Dean

Alice Crossley, Elementary Education

Thomas Devine, Secondary Education

Emmanuel Green, Counselor Education

Gaylen Kelley, Audio-Visual Services

Malcolm Knowles, Adult Education

Donald Maietta, Special Education

Richard Rapacz, Foundations of Education

Lorraine Tolman, School Library Program

James Wylie, Health, Physical Education and Recreation

## Conference of Consultants, May 18, 1967

Following preparation of a draft copy of the overall recommendations  
and details for each proposed unit, an all-day conference of consultants and  
the project staff was held. Attending the conference were:

Bertram Berenson  
Eileen Connolly  
Leo Connor  
Allan Leitman  
Wilbert Pronovost  
Edith Rosenstein  
Harrie Selznick

This conference permitted group discussion and reactions to a draft pro-  
posal. Interaction between consultants clarified several issues and questions

Recommendations were incorporated into the proposal. Additional planning tasks were also identified for future consideration.

Conference of Boston School Department Personnel and Boston University Consultants, May 22-23, 1967.

A two-day conference of Boston School Department and Boston University Personnel was held at White Cliffs, Plymouth, Massachusetts, with the Project Director, Educational Specialist and State Department of Education representative in attendance. The group was composed of:

William Tobin  
Herbert Forsell  
William Gorman  
William Miller  
Jack Childress  
Alice Crossley  
Thomas Devine  
Emmanuel Green  
Gaylen Kelley  
Richard Rapacz  
Lorraine Tolman  
James Wylie  
Eileen Connolly  
Marianne McKeon  
Wilbert Pronovost

This conference permitted discussion and reactions to the draft proposal by administrators who would be responsible for implementing the recommendations together with a group of educators whose primary competencies and interests were related to programs for normal rather than hearing impaired children. Dr. Jack R. Childress, Dean of the Boston University School of Education served as discussion leader. Discussions focused on a re-examination of the overall recommendations, the assumptions upon which these recommendations had been based, and upon unresolved problems that had been identified. The decisions and recommendations of this conference have been incorporated in appropriate sections of this report.

The discussions of the conferences of May 18 and 22-23 have been invaluable for the planning project staff in guiding them to clarify and refine much of the material included in this report.

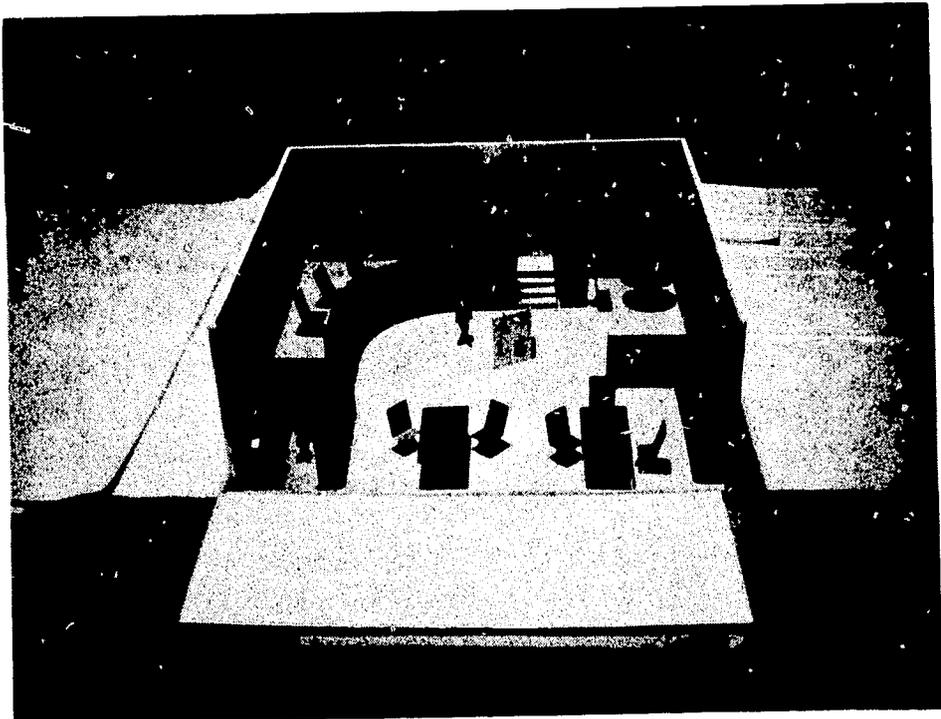
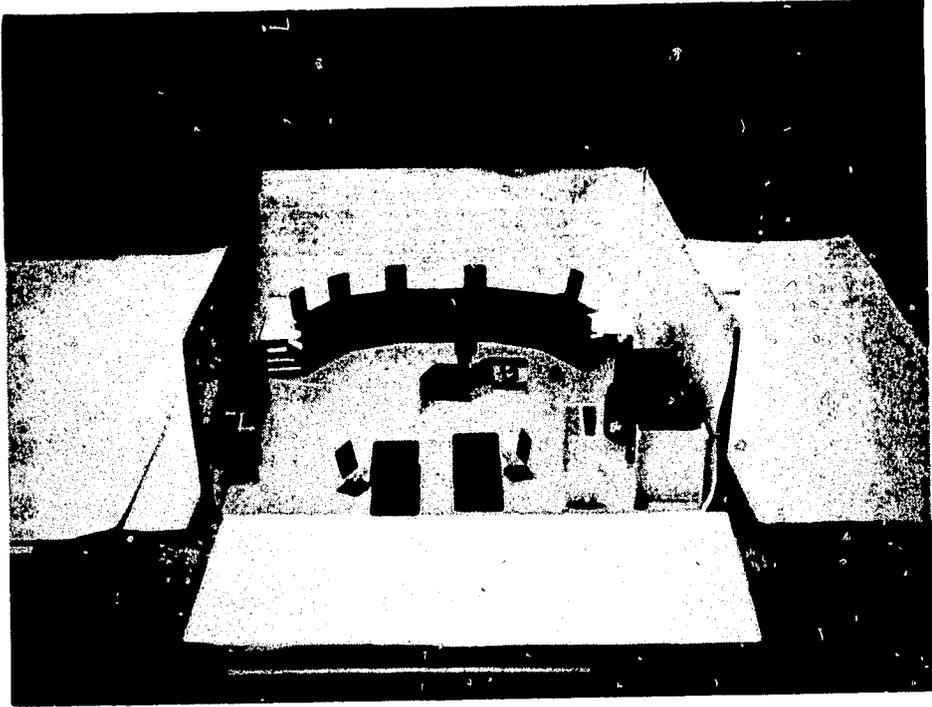
## APPENDIX E

Architectural Considerations in  
Classroom Environments

One of the features of the Horace Mann Planning Project was the early involvement of a consultant architect, Mr. Bertram Berenson, of the Hampton Institute, Department of Architecture, and the Tidewater Design Group. Mr. Berenson had considerable experience in the development of innovative designs and classroom environments for a wide variety of atypical children. He is consulting on other designs for schools for the deaf and has visited schools for the deaf in the United States and Europe with the special intention of determining special features which might be incorporated into innovative designs. Mr. Berenson guided the planning project staff in the identification of educational objectives and activities which could be so specified that the educational environments for the children could be designed by an architect. In addition, the Tidewater Design Group developed a series of models of classroom environments in which the activities identified by the teachers and the planning project staff could be carried out. Figure 3 shows photographs of models of two classroom arrangements developed by the Tidewater Design Group. One of the features of this design is arrangement of classroom areas, furnishings and equipment according to the nature of the activities conducted in each area.

The raised platforms for the students' desks is designed to provide easier visual communication between the teacher and pupils and facilitate lipreading. The height of the platforms will vary with the age and height of the children.

The latest consensus of the planning staff is to suggest a minor modification of the model in the lower portion of Figure 3.



**Figure 3. Models of classroom environments**

## APPENDIX F

Planning for Science Activities

This phase of the planning activities was conducted by Education Services, Inc., Newton, Massachusetts, under the direction of Dr. Allan Leitman. Dr. Leitman was formerly a teacher of science at the Lexington School for the Deaf. Some of the activities explored in this project were based on Dr. Leitman's doctoral dissertation, Science for Deaf Children, Teacher's College Columbia University, 1966. Staff members of Education Services, Inc. and students in Early Childhood Education Programs of Wheelock College also participated.

**Purpose:** To observe the kind of activities in which deaf children engage with science materials in order to determine guiding principals and implications for classroom spaces and arrangements.

**Planning Activities:** A workshop on the utilization of science materials by children was conducted for the teachers of the Horace Mann School.

Nursery class children experimented with a variety of home-made musical instruments. (See Figure 6)

Two classes of children of the middle grades engaged in science activities with thermometers, liquids, batteries and bulbs, and the construction of a play frame. (See Figure 4)

Two classes of children of the upper grades engaged in activities with silk screening and a printing press. (See Figure 5). Children wrote their own stories and newspapers and printed them.

A middle grade class of children went on a field trip to a suburban park and then to a teacher's home where a report was written. (See Figure 7).

**Production of Film:** A silent motion picture was developed of the children's participation in the various science activities. The film may be borrowed for selected showing by contacting Dr. Allan Leitman, Education Development Center, 55 Chapel Street, Newton, Massachusetts, 02160.

**Future Activities:** Teachers of the Horace Mann School for the Deaf will participate in an Early Childhood Education Study being conducted by the Education Development Center, Dr. Allan Leitman, Project Director, under a grant from the Office of Economic Opportunity.

Science (cont.)

Facilities of the Horace Mann School Shops will be used by teachers in the construction of science materials.

A research and development proposal for implementation of Dr. Leitman's dissertation, Science for the Deaf, is being prepared for submission to the U.S. Office of Education.

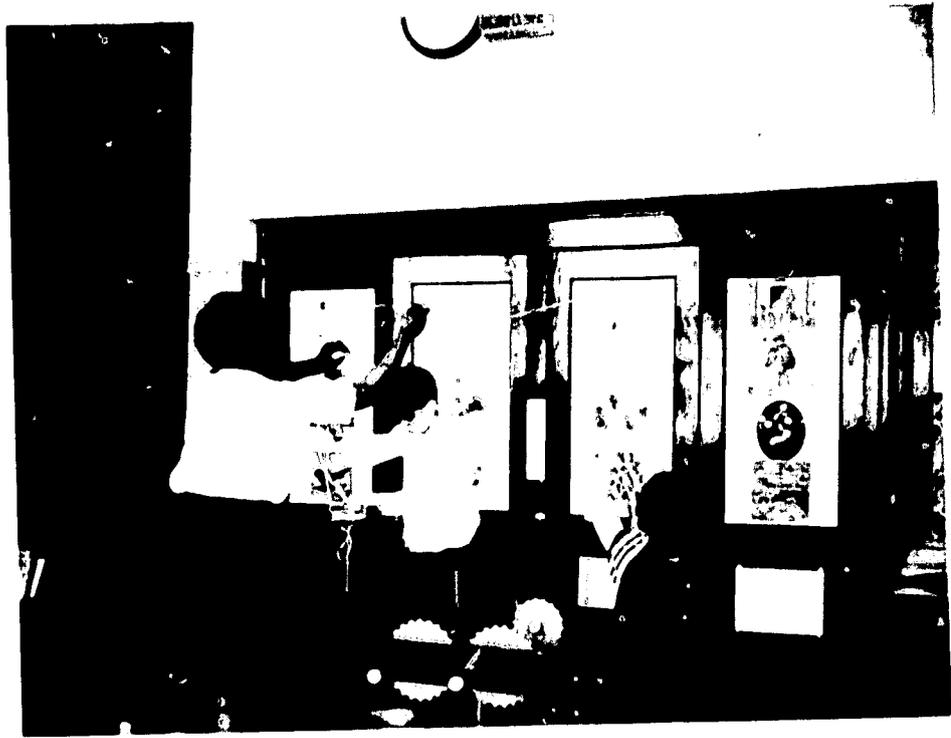
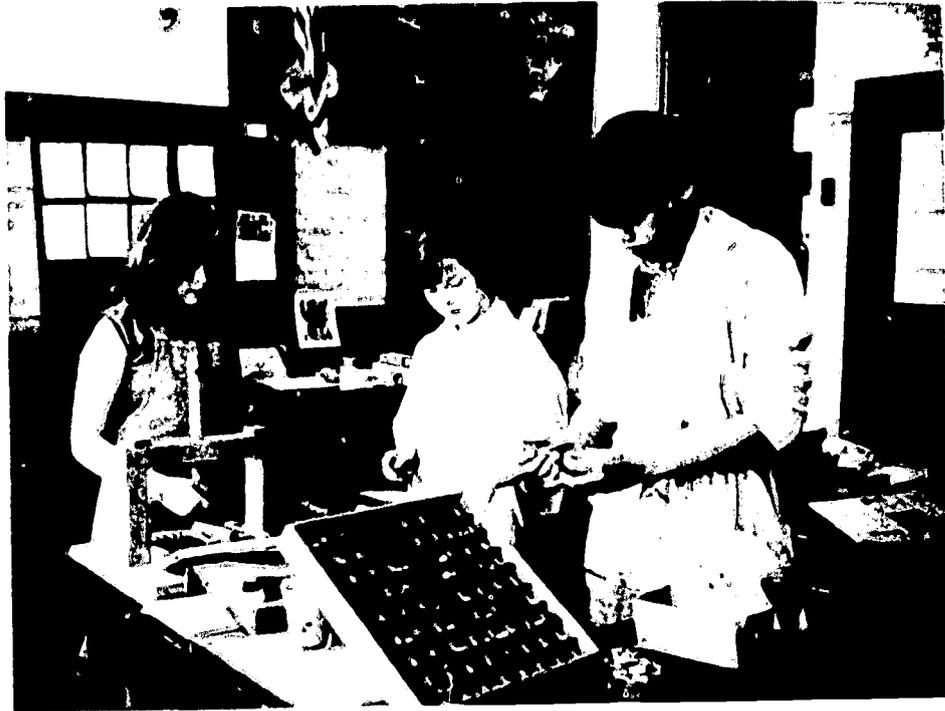


Figure 4. Science program - the play frame



**Figure 5. Science program - the printing press**



Figure 6. Science program - a home-made musical instrument



Figure 7. Science program - writing the report of a field trip

APPENDIX GVisits to Other Programs

The project director and educational specialist have visited the following programs and conferred with personnel of these programs:

Toronto School for the Deaf  
Central Institute for the Deaf  
St. Joseph's Institute for the Deaf  
Lexington School for the Deaf  
Public School 47, New York City  
Public School 158, New York City  
Gallaudet College Hearing and Speech Center  
Kendall School for the Deaf  
William Baer School for the Deaf, Baltimore  
Center for Children with Communicative Needs, Baltimore  
Illinois School for the Deaf

Conferences held in Washington, D.C. with:

Mrs. Patricia Forsythe, Secretary,  
National Advisory Council on Education of the Deaf and  
Hard of Hearing  
U.S. Office of Education

Mr. Boyce Williams, Consultant,  
Deaf and Hard of Hearing  
Vocational Rehabilitation Administration

APPENDIX HSurvey of Massachusetts Hearing-Impaired Children  
with Additional Handicaps

A survey to obtain information concerning the extent to which hearing-impaired children have additional handicaps was conducted by Mrs. Lois Odle, Consultant Speech Pathologist. A questionnaire and covering letter (see pages H-2 and H-3) were sent to selected schools, clinics, agencies and institutions outside of Massachusetts who were known to have provided some type of service to hearing-impaired children of Massachusetts. A preliminary summary of the results of the survey received by July 1, 1967, is presented on Pages H-4 to H-7. Final results will differ when all reports have been received.

a cooperative Project of the  
BOSTON PUBLIC SCHOOLS and BOSTON UNIVERSITY

under a grant from the  
U.S. DEPARTMENT of HEALTH, EDUCATION and WELFARE  
Title III of PL 89-10  
Elementary and Secondary Education Act of 1965

May 29, 1967

Dear Sir:

RE: HEARING IMPAIRED CHILDREN OF MASSACHUSETTS  
WITH ADDITIONAL HANDICAPS

The Horace Mann Planning Project is conducting a survey to determine the number of children of Massachusetts families who may be classified as multiply-handicapped hearing impaired children.

The purpose of this survey is to study how the educational needs of this group of children are being met, in order to be able to make recommendations for the future.

We are interested in knowing about all Massachusetts children of this type between birth and 21 years of age who are enrolled in your pre-school or school program, who have applied for admission to your program and were rejected or referred elsewhere, who are receiving therapy aimed at improving communication, or who have been seen for evaluation or testing.

We would appreciate your going back over your records of the past two years, (1965-67), if you can do so conveniently, in order to supply the names of children who have been seen, but with whom no lasting contact has been maintained.

Some of you receiving this survey form will have few or no children to report. We ask that you consider your response carefully, as we are particularly anxious to know of children with auditory impairment who receive their training or schooling in facilities designed for the physically handicapped, the emotionally disturbed, or the mentally retarded.

Please return the form to us even if the information you have is incomplete, and also if you have no children to report, so that we will know you have responded. We enclose a stamped self-addressed envelope for your convenience. Please return all forms before June 15, 1967. Please note that we ask you to report only those multiply-handicapped deaf children whose homes are in Massachusetts.

Thank you very much for your cooperation.

Sincerely yours,

*Lois Odle*

Lois Odle, M.Ed., Consultant  
Horace Mann Planning Project

*Wilbert Pronovost*

Wilbert Pronovost, Ph.D., Director  
Horace Mann Planning Project

**\* MASSACHUSETTS HEARING-IMPAIRED CHILDREN WITH ADDITIONAL HANDICAPS**

Name of School or Clinic Reporting \_\_\_\_\_  
Address \_\_\_\_\_

Name of Person Reporting \_\_\_\_\_  
DATE \_\_\_\_\_

\*\*\*

Name of Child	HOME ADDRESS	BIRTHDATE	NATURE OF AUDITORY DEFECT (check one or two)**				(check) NATURE OF ADDITIONAL HANDICAPS							
			Deaf	Hard of Hearing	ARLD (aphasic)	Uncertain	Behavior Problem	Learning Disability	Cerebral Palsy (any type)	Visual Disability (requiring special planning)	Physical or Health Disability (other than C.P. or Visual)	Diagnosis Uncertain		

Note: report only Massachusetts children.

\*For purposes of this survey, "Hearing Impaired" means deaf, hard of hearing, and those with auditory receptive language Disorder (aphasia) Please report existence of additional handicaps in children of all three groups.  
\*\* In cases of children who may be both deaf (or hard of hearing) and aphasic, be sure to check both columns.

\*\*\* Many children will have several handicaps. Please check all appropriate columns. Add your own category if you wish. If diagnosis is uncertain or if you wish to avoid labeling child, check "Uncertain" column.

Preliminary Summary of Findings of Survey

(Results received as of July 1, 1967)

1. Total Number of Children Reported by Name ..... 339  
(all names cross-checked and duplications  
eliminated before this count)

Total Number of Children Reported, but names withheld ..... 31

TOTAL, named and un-named 370

Note: This figure does not include 34 un-named children on a list submitted by the State Department of Special Education prior to the beginning of our Survey. This information was not in a suitable form to be useful in the present tabulation. It will be dealt with at a later date.

2. General Kind of Educational Placement Represented by Findings:

- a. Number reported as being enrolled in some kind of program or school for the deaf (including pre-school programs) or deaf-blind in Massachusetts ..... 108
- b. Number reported as being enrolled in some kind of program or school for the deaf (including pre-school correspondence course for parents) outside of Massachusetts ..... 70
- c. Number reported as being enrolled in a facility designed primarily for children with some handicapping condition other than auditory impairment, in Massachusetts ..... 87
- d. Number reported as being enrolled in a facility designed primarily for children with some handicapping condition other than auditory impairment, outside Massachusetts ..... 17
- e. Number reported by clinics and diagnostic centers who were not reported by any school or training program..... 88

Note: This rather large number is probably due to the fact that the majority of children reported by Clinics are now pre-school age. A rough tabulation of years of birth shows a peak at year 1964. Children's Hospital Medical Center reported 35 multiply-handicapped deaf children born in 1964 and 20 children on the Tracy Clinic list were born in 1964. A later tabulation will deal with age groups.)

3. Reported by Clinics and Diagnostic Centers in Massachusetts -  
Names given.

\* (Numbers given are those remaining after cross-checking  
and eliminating duplication.)

Children's Hospital Medical Center .....	36
Robbins Speech and Hearing Center .....	7
New England Medical Center .....	15
Springfield Hearing and Speech Center .....	9
University of Massachusetts Communications Disorders Area .....	14
Massachusetts General Hospital - Language Clinic .....	2
Franklin County Hearing and Speech Center .....	3
	86

Reported, but names withheld:

Psycho-Social Services for the Deaf .....	2
---	---

TOTAL      88

\* In cross-checking names, when a name was reported both by a Clinic or Diagnostic Center and by an educational program or institution, the name was removed from the Clinic list and left on the list of the educational institution, since an important feature of our Survey was to discover where such children were being trained or educated. This is of importance or interest in only a few instances, primarily in the case of Children's Hospital Medical Center, who reported 44 names. However, 8 of those named were also reported by schools or training programs, so they were subtracted from the number reported by Children's Hospital. In other such cases, the number of children involved was only one or two to subtract from the number reported by a clinic or diagnostic center.

4. Reported by Schools and Classes for the Deaf (including pre-school)  
in Massachusetts

(Names cross-checked and duplication eliminated)

Pre-School Program - Charlestown .....	3
Pre-School Program - Quincy .....	1
Pre-School Program - Salem .....	2
Day Class - Woburn .....	2
Clarke School for the Deaf .....	14
Horace Mann School for the Deaf .....	76
	98

Reported, names withheld:

Day Class - Springfield .....	4
TOTAL	102

Summary of Survey (cont.)5. Reported by Schools and Programs for the Deaf outside of Massachusetts  
(Names cross-checked and duplication eliminated)

John Tracy Clinic Correspondence Course .....	35
Crotched Mountain School for the Deaf .....	25
Greenfield, N.H	
The Austine School, Brattleboro, Vt.....	9
Central Institute for the Deaf, St. Louis.....	1
	<hr/>
Total	70

6. Reported by Facilities for the Multiply-Handicapped Blind,  
in Massachusetts

Perkins School - Deaf-Blind Department .....	6
Fernald School- Greene Blind Unit .....	3
	<hr/>
Total	9

(Note: Casual inspection of reports of disability seems to show a large number of reports of visual disability among children reported by clinics and diagnostic centers and by schools and classes for the deaf. This information will be contained in a tabulation by type of defect, which is to be made at a later date.)

7. Reported by Institutions or Schools for Retarded, Brain Injured, etc.,  
in Massachusetts.

Paul A. Dever State School .....	12
Fernald School .....	16
Our Lady of Mercy School, Worcester .....	6
Pollock School, Brookline .....	2
St. Coletta's School .....	<u>1</u>
Total	37

8. Reported by Schools or Institutions for Retarded, Brain Injured, etc.,  
outside of Massachusetts.

The Devereux Foundation, Devon, Pa.....	15
The Woods Schools and Residential Treatment Center, Langhorne, Pa.....	1
Meeting Street School, Providence, R.I.....	<u>1</u>
Total	17

Summary of Survey (cont.)

9. Reported by Schools or Classes for the Physically Handicapped, in Massachusetts

Mill-Swan School-Clinic for Handicapped, Worcester.....	6
Massachusetts Hospital School, Canton .....	1
United Cerebral Palsy of Merrimack Valley .....	<u>4</u>
Total	11

Reported, but names withheld:

Cerebral Palsy Clinic - Quincy .....	9
Cerebral Palsy Council of Greater New Bedford .....	<u>16</u>
Total	36

10. Reported by Institutions or Schools for the Emotionally and Socially Maladjusted, in Massachusetts

Massachusetts Division of Youth Service - Residential Treatment Unit, Oakdale .....	2
Institute for Juvenile Guidance, Bridgewater .....	1
James Jackson Putnam Children's Center .....	<u>5</u>
Total	8

11. Tutoring and Remedial Schools, in Massachusetts

Dearborn School, Cambridge .....	1
Bartlett School, Arlington .....	1
Kingsley School, Boston .....	<u>1</u>
Total	3

APPENDIX IParticipation in National and International Conferences

The project staff and staff of the Horace Mann School for the Deaf participated in several conferences whose programs related to the topics and issues of the Horace Mann Planning Project.

International Conference on Oral Education of the Deaf, Northampton and New York City, June 18-25, 1967. This conference celebrated 100 years of oral education of the deaf in the United States. A majority of the staff of the Horace Mann School for the Deaf attended the week-long conference. The educational specialist of the project served as chairman of two section meetings. The project director presented a paper about the Planning Project.

Fifth Congress of the World Federation of the Deaf, Warsaw, Poland, August 10-17, 1967. The project director attended sessions and presented a paper. The theme of the conference was "The Deaf Among Hearing People", a major focus of the Horace Mann Planning Project.

International Conference on Speech Analyzer Aids for the Deaf, Washington, D.C., June 14-17, 1967. The project director was co-author of two technical papers and demonstrated The Voice Visualizer.

Advisory Committee, Library Project School Library Services for the Deaf, Columbia University. 3 meetings in 1966-67. The educational specialist was a Committee Member.

National Research Conference on Day Programs for the Hearing Impaired, Lake Mohawk, N.Y., May 10-13, 1967. The educational specialist served as Recorder for Work Group B.

Project LIFE. The educational specialist and Assistant Principal served as consultants.

National Conference on Audiology and Education of the Deaf, Tucson, Arizona, December, 1964. The project director was a participant.

New England Regional Conferences on Audiology and Education of the Deaf, Wentworth, New Hampshire, September 24-25, 1965. The project director was conference chairman. The principal, assistant principal and nurse of the Horace Mann School were participants.

Virginia Beach, Virginia, March 15-19, 1964. The project director was a topic and group chairman.

Third Regional Conference of Rehabilitation Codes, Lake Ozark, Missouri, April 25-30, 1967. Project Director was Resources Faculty member discussing adaptation of the Codes for the Horace Mann Pilot Operational Project.

## APPENDIX J

The Harrington Bill

THE COMMONWEALTH OF MASSACHUSETTS  
in the year one thousand nine hundred and sixty-seven

Senate Bill S 124 submitted by Senator Kevin Harrington.

AN ACT PROVIDING FOR THE ESTABLISHMENT BY THE DEPARTMENT OF EDUCATION OF A CENTER IN THE CITY OF BOSTON TO BE KNOWN AS THE HORACE MANN CENTER FOR COMMUNICATIVE DISORDERS.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION I. The department of education shall support the construction, operation and maintenance of a building or buildings in the city of Boston to be known as the Horace Mann Center for Communicative Disorders, for the purpose of providing diagnostic, evaluation, treatment, educational training services from pre-school to high school; and other necessary services to meet the needs of deaf children, aphasic children, and deaf children with associated learning and behavior disorders.

SECTION II. Said department and the city of Boston shall, in addition to providing services to the general public, cooperate with the school departments of the commonwealth, and with public and private social and welfare agencies in the examination, treatment, and training of patients referred to said center by such public and private agencies.

SECTION III. Said center shall contain (1) a clinical unit, to provide an educationally oriented inter-disciplinary diagnostic team approach to the communicative, learning and behavior problems of deaf and otherwise auditorily handicapped children; (2) a pre-school kindergarten and parent education unit; (3) an elementary school unit; (4) a junior-senior high school unit; and (5) a special services unit, containing a library, instructional materials center, auditorium, cafeteria, recreational and physical education area, and facilities for research and teacher training.

SECTION IV. Said department may expend for the maintenance of said center such sums as may be appropriated therefore, and in addition may expend any federal, public, or private funds available for the purposes.

## APPENDIX K

Educational Evaluation, Educational Programming  
and  
Individualized Educational Services

for

Children With Auditory Disorders

a cooperative Project of the  
BOSTON PUBLIC SCHOOLS and BOSTON UNIVERSITY

under a grant from the  
U.S. DEPARTMENT of HEALTH, EDUCATION and WELFARE  
Title III of P1 89-10  
Elementary and Secondary Education Act of 1965

Approved for 1967-1970

Objectives:

- A. To provide comprehensive educational evaluation of children with known or suspected auditory dysfunction who are not achieving at the level of their educational potential, or for whom educational placement has not been determined, or whose educational placement appears inappropriate.
- B. To provide trial educational programming as a basis for determining a child's patterns of learning and the most appropriate educational procedures to meet the child's individual needs.
- C. To provide ongoing contact with the educational setting in which a child is placed, through teacher consultations and demonstrations of teaching procedures, so that the educational setting can meet the child's individual needs.
- D. To provide periodic reevaluations to determine the efficacy of the recommendations and to suggest modifications of educational procedures as indicated by the reevaluations.
- E. To provide individualized educational services in selected cases where these services are not available in existing programs.
- F. To provide demonstrations of new special class organizations and procedures for groups of children for whom current classroom organizational patterns are inappropriate, i.e.-class for hard of hearing; class for multiply handicapped.
- G. To evaluate the results of the pilot project with newly developed data-coding techniques as a basis for recommending future educational programs which should be developed in schools and centers for the hearing handicapped.

Procedures:

- A. Referrals to the Evaluation Center.  
Sources of referrals are indicated in Figure No.1.  
Referrals may be made by any appropriate staff member of the referral agencies. Evidence of the known or suspected auditory disorder (evidence may be behavioral patterns and not

necessarily test data) will be requested of the referral agency along with reports of all previous diagnostic procedures and education. When parents contact the Horace Mann Center directly, the Center staff will contact the officials of the child's most recent educational placement prior to the first appointment at the Center.

#### B. Medical Consultation.

The nurse, through parent conferences, will insure that recent medical examinations have been undertaken, with reports received from medical centers or private physicians (especially otologists and pediatricians) and that all necessary medical attention has been received. Parents may request that the child be examined by the otologist of the School Health Services who daily visits the Horace Mann School for the Deaf.

In addition, the health services of the Tufts-Quincy School Title III project will be made available to children in the Horace Mann Pilot Project, if requested by the parents.

#### C. Educational Evaluation.

Comprehensive educational evaluation will occur in an especially designed evaluation area. When the parent and child report for the first appointment, the receptionist will seat the parent in the lounge area adjacent to a play area for the child. The child will be able to play with educational toys that will permit an easy transition to some of the test materials used in psychological and audiological evaluations. The educational psychologist will use the individual evaluation room to administer a battery of formal and informal tests to evaluate the child's present level of functioning and potential. The audiologist will use the audiology suite to conduct a current evaluation of the child's auditory functioning. A clinical teacher will use individual tutoring booth to determine the child's response to trials of educational procedures. Areas to be evaluated are discussed under Section D. Parental interviews to obtain background information will be undertaken, as appropriate, by any member of the evaluation team through coordination of the psychologist. More than one evaluation session is anticipated. Interpretations of findings to the parents will be made by the psychologist.

#### D. Educational Programming.

Following the initial educational evaluation children will spend up to a half-day, on a daily basis, in an area especially designed to determine the child's responses to trial educational programs. (See floor plan in Part II.) The area includes separate areas for group teaching, individual tutoring, (See sketch of booth in Section XI.), individual seat work (See sketch of individual study desk in Section XI.), crafts area, and library area. The areas permit a variety of learning activities to determine the child's learning patterns and to suggest educational procedures most appropriate to the child's individual needs. Each child would be temporarily enrolled in the educational programming phase for at least one week. Longer periods will be required by many children, but the length of the period is expected to vary widely from child to child. Clinical teachers will be assisted in management of children in the educational programming phase by a teacher aide.

#### E. Staffing and Recording Information.

Through staff conferences, the case study information will be discussed and recommendations developed. The data will be recorded on IBM cards by means of the Communicative Disorders Impairment Codes, developed by Rehabilitation Codes, Inc., under a grant from the National Institutes of Neurological Diseases and Blindness of the Public Health Service. (The Director of the pilot project has participated in workshops using the Impairment Codes and has been invited to be a resource faculty member of another workshop to be held near Springfield, Missouri, in April. The Horace Mann Pilot Project would serve as a pilot project for field-testing the use of the Impairment Codes.) The Rehabilitation Codes permits coding for IBM or Key Punch data recording and retrieval in the areas of:

- Impairment of Psychosocial Function
- Impairment of Language Comprehension and Usage
- Impairment of Voice Function
- Impairment of Hearing Function
- Impairment of Speech Function

The Rehabilitation Codes materials include a Serial Record and an Active Service Cumulative Record. Decisions as to the coding of each item of behavior are made in the staffing conferences. The Impairment Codes are designed to reflect changes in behavior and functioning in the assignment of a different code number when changes occur. The Director of the Pilot Project will participate in the staffing sessions devoted to coding information.

#### F. Teacher Consultations:

Recommendations of the staff will be transmitted to teachers in the child's regular educational setting by clinical teachers. The clinical teachers may demonstrate various educational procedures with the child. The child's teacher might also be invited to observe the child in the Center during the educational programming phase. The clinical teacher's task is to be as helpful as necessary to the child in his regular setting so that the child may remain in the setting and obtain the necessary adaptations of his educational program.

G. Periodic reevaluations of each child will be conducted throughout the three year period of the pilot project in order to evaluate the child's progress and to suggest modifications of procedures if indicated. The reevaluations will be conducted at least yearly, oftener if required in the opinion of the Center staff, or at the request of the child's teacher.

#### H. Individualized Educational Services:

Certain individualized educational services to supplement classroom instruction may be required by certain children. These services include remedial instruction, tutoring in academic subjects, development of communicative skills, guidance and counseling services, etc. Whenever possible, these additional services will be sought in the child's regular school program. Many schools provide speech and hearing therapy, tutoring in academic subjects and guidance and counseling services. When services are not available in the child's

school, referrals will be suggested to appropriate community agencies. In addition, a small number of children may receive individualized educational services from the Center staff as a demonstration of the efficacy of these services.

#### I. Demonstration Classes:

It is expected that certain hard of hearing children and certain deaf children with multiple problems will require classroom settings and approaches which are not currently in existence. Therefore, during the second and third year of the project, a demonstration class will be conducted by one of the clinical teachers. During one year, a demonstration class for hard of hearing children requiring a special classroom approach will be conducted. During the other year, a demonstration class for deaf children with multiple learning and behavior problems will be conducted. The specific class to be conducted during the second year will be determined as a result of experiences in the evaluations of the first year.

#### Staff and Staff Responsibilities:

**Project Director:** Coordination and supervision of all project activities with primary responsibility for the data collection analysis for the evaluation of the project.

**Educational Psychologist:** Conduct all psychological evaluations, confer with parents, coordinate staff meetings, teacher consultations and recommendations. Be responsible for all services to children.

**Educational Audiologist:** Conduct audiological evaluations and reevaluations and supervise educational programming and recommendations in auditory training and use of amplifying equipment including the child's hearing aid.

**Clinical Teachers:** Assist psychologist and audiologist in initial educational evaluation. Assume primary responsibility for educational programming, teacher consultations and demonstrations.

**Nurse:** Maintain contact with parents, medical centers, school health services and State Public Health Department in matters pertaining to the child's physical health, medical records, financial assistance with hearing aids, etc.

**Teacher Aide:** Assist clinical teacher in the management of children during the educational programming phase. Guide children in certain individual study activities under the direction of the clinical teacher. Conduct informal and recreational group activities, as may be required.

**Secretary:** Management of the Center office. Establishment of record system. Handling of correspondence. Typing. Supervision of typing by receptionist. Maintaining case study data and reports of case conferences.

**Receptionist-Typist:** Maintain appointments schedule for educational evaluations and educational programming. Receive and process telephone and mail inquiries. Type reports under supervision of secretary.

Facilities, Equipment and Materials

A. The facilities to be used are the room currently used as the Printing Room in the basement of the Horace Mann School for the Deaf and the adjacent room currently unassigned. The Printing Room will be consolidated into a smaller room (currently unassigned) adjacent to the Woodworking Room.

The space to be used for the Educational Evaluation and Educational Programming is 2,200 square feet. This space includes the Program Director's Office. Desk space for the center staff will be located in a room directly above the center, adjacent to the present staff room of the Horace Mann School, which will also be used for staff conferences of the center staff.

Renovations involve: - - estimated cost - \$14,000

Drapes for windows  
 Plyscore floor and carpeting  
 Suspended acoustic ceiling with new lighting  
 Lowered floor for audiology suite  
 Acoustic treatment of walls  
 Construction of an evaluation room 10'x10'  
 Electrical outlets  
 New sink  
 Removal of shelves in Director's Office

Telephone:

1 Telephone and 2 Extensions - - - - - \$400.00

Television System: for Observation and Evaluation

(Estimates provided by Lake Service Corporation, Watertown, Mass.)

<u>ITEM</u>	<u>QTY.</u>	<u>Description</u>	<u>Total Price</u>
1	3	Concord Model MTC 15 Cameras @ \$375	\$1,125.00
2	1	Concord Model VTR 600 Video Tape Recorder	1,150.00
3	1	Concord Model MR 600 Video Monitor	160.00
4	1	Concord Model VO 600 Inter- connecting Cable	15.00
5	5	Mounting Brackets @ \$20	100.00
6	1	Tripod Model TPR 16	28.00
7	3	Microphones @ \$40	120.00
8	2	Television Receivers @\$180	360.00
9	10	Concord Model VT-4 -60 minute Video Tape @\$60	600.00
10	1	Concord Model RFC 60 Crystal Control Converter	60.00
11		Cable and Installation Estimate	<u>500.00</u>
System Total - - - - -			\$4,218.00

Facilities, Equipment and Materials (cont.)Equipment List:

## Lounge-Reception Area:

2 Lounge Chairs  
 1 Lounge Settee  
 1 Low Table  
 3 Ash-tray Stands  
 2 Open-shelve Cabinets  
 1 Receptionist Desk with Typing Arm  
 1 Secretarial Chair  
 2 Side Chairs  
 1 Typewriter  
 1 Transcription Play-back

## Individual Evaluation Room:

Large Storage Cabinet  
 Table 2'x4'  
 2 Children's Chairs  
 2 Adult Side Chairs  
 Counter for Audio Equipment (to be constructed)  
 Talk-back Microphone with Amplifier and Head Set - - - - \$75.00  
 4 Wall-mounted Loud Speakers connected to 4 Phone-jacks on  
 Jack Panel - - \$40.00

## Audiology Suite:

Combination Examination and Control Room  
 Industrial Acoustics Corp., Model 1404 ACT  
 (Room, freight and installation) - - - - - \$10,000  
 Grason-Stadler Speech Audiometer with  
 Dual Speakers and Amplifiers - - - - - 2,200  
 Grason-Stadler Bekesy Audiometer - - - - - 3,400  
 Clinical Audiometer (Marco or Beltone) - - - - - 1,800  
 Counter or Table for Equipment 2'x8'  
 Table 30"x36"  
 2 Side Chairs (adult height)  
 2 Storage Cabinets  
 Miscellaneous Cables, Tools, Batteries  
 Examining Room  
 1 Adult Side Chair  
 1 Child's Chair  
 1 Child's Chair  
 1 Table 24" x 36"  
 1 Open-shelve Storage Cabinet

## Program Director's Office:

1 Desk  
 1 Desk Arm Chair  
 2 Side Chairs  
 1 Secretary's Desk with Typing Arm  
 1 Secretary's Chair  
 3 5-drawer Filing Cabinets  
 1 Filing Cabinet for IBM Cards  
 1 Bookcase or Shelving

Facilities, Equipment and Materials (cont.)

Equipment List (cont.)

Staff Office Area:

- 3 Desks
- 3 Arm Chairs
- 3 Side Chairs
- 3 5-drawer Filing Cabinets

3 Individual Tutoring Booths (to be constructed) - - - - - \$2,500  
(see sketches and specifications)

4 Individual Study Desks (to be constructed) - - - - - 2,000  
(see sketches and specifications)

Chairs for Booths and Study Desks

- 4 Adult Chairs
- 2 Children's Chairs
- 2 Child's Chairs
- 2 Child's Chairs
- 1 24" x 24" Portable Blackboard

Audio-visual Equipment for Booths

- 1 Cartridge-type 8mm. Projector-  
Technicolor Rear Screen Projector - - - - - 150.00
- 1 Language Master and Materials - - - - - 400.00
- 1 Film-strip Projector - - - - - 150.00
- 1 Slide Projector (Carousel) - - - - - 350.00

Educational Programming Area

Group Teaching

- Wall Blackboard and Bulletin Board and Screen
- Portable Blackboard with Flannelboard or Magnetic Board
- Easel for Chart Displays
- 1 Teachers Desk
- 2 Chairs
- 2 Children's Chairs
- 2 Children's Chairs
- 2 Children's Chairs
- 1 Teacher's Table 2' x 4'
- 1 Projector - Transparencies - - - - - \$200.00
- 1 Phonograph - - - - - 100.00

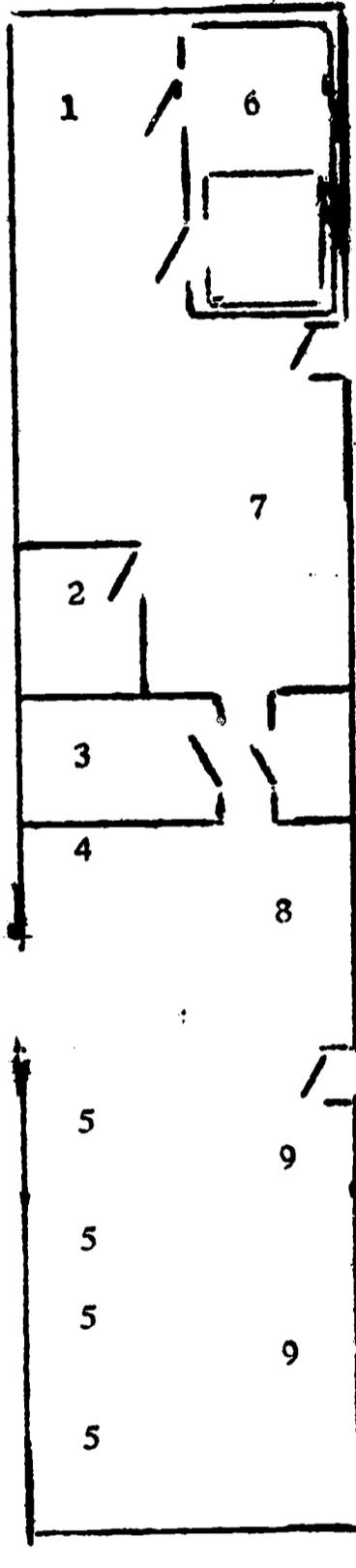
Auditory Trainer

- 1 EFI Auditory Training Unit  
with 8 Individual Headsets - - - - - -2,800.00

Multipurpose Area

- 1 Table 30" x 60"
- 4 Child's Chairs
- Open-shelve Storage for Books and Games
- 1 Arts and Crafts Work Table (movable)

1. Individual Tutoring Booth



6. Audiology Suite

7. Lounge Area

2. Evaluation Room

3. Office

4. Group Teaching Area

8. Multi-purpose Area

5. Individual Study-Desk

9. Individual Tutoring Booth

Floor Plan showing location of areas

## APPENDIX L

Dissemination of Information

A feature news story with photographs appeared in the following:

The Boston Sunday Herald  
The Boston Sunday Globe  
The Boston Sunday Advertiser  
The Boston University Alumni News Letter

Other news stories appeared in:

The Boston Traveler  
The Rehabilitation News  
The Volta Review

Speeches describing the project were given by the Project Director at:

Home and School Association of the Horace Mann School  
Thayer-Lindsey Nursery Parents Group  
Massachusetts Council for Exceptional Children  
Speech and Hearing Area Meeting (Eastern Massachusetts)  
International Conference on Oral Education of the Deaf

Reports on the project were presented as papers at the International Conference on Oral Education of the Deaf by the Project Director and by Dr. Allan Leitman, who showed a film of the science program in action.

## APPENDIX M

Bibliography

The attached bibliography lists selected articles, abstracts and books which were examined in relation to several of the issues and programs being considered during the planning process. It is neither comprehensive nor extensive as far as all aspects of the recommended programs are concerned, but is included to indicate the scope of some of the literature to which the planning staff referred in varying degrees. No attempt has been made to use the bibliography to document formally the recommendations of the planning staff.

Periodicals referred to in the bibliography are:

1. American Annals of the Deaf (Annals)
2. Deafness, Speech and Hearing Abstracts (dsh Abstracts)
3. Exceptional Children
4. Journal of the American Speech and Hearing Association (ASHA)
5. Proceedings of the American Instructors of the Deaf
6. The Deaf American
7. The Volta Review (Volta)

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This Bibliography is arranged alphabetically by author.  
Each article or book is coded\* to show the unit or units to which it applies.

- \* Ev - Assessment and Individualized Services - Clinical
- P - Parent, Nursery and Primary Education Unit
- El - Elementary Education Unit
- S - Secondary Education Unit
- A - Adult Education Unit
- CF - Common Facilities
- MH - Multiply Handicapped
- TP - Teacher Preparation, Preparation of Professional Personnel,  
Research
- PR - Public Relations

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