## Task Force 10:

## Development of Models of Professional Preparation

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Professional preparation of the audiologist has been underway for about a quarter of a century, and until standards were set by the ABESPA-ETB, the training was highly variable from institution to institution. With the advent of standards there has been movement toward greater homogeneity among programs of education and training.

Apparently we have not as yet reached the ultimate in training of the audiologist for if we had, I doubt that we would be giving this topic a place on the Academy program. On second thought, I hope we never do consider the preparation of audiologists a completely settled matter, but rather always keep it before us in order that we might improve the service that is eventually rendered by the audiologist.

There were, as you can see on the program, a number of us giving some thought to the matter of training models. Each one of us prepared some thoughts concerning training and it is my intention to share some of the highlights of each person's contribution with you, and attempt to summarize their thoughts. In the discussion period to follow there will be more time to explore in greater depth the suggestions of each of the contributors.

Dr. Janet Jeffers' statement regarding training of rehabilitative audiologists emphasizes the thought that the rehabilitative audiologist should be a combination of a "clinical audiologist" and a "hearing clinician" and one who is responsible for meeting the needs of assessment, amplification, and developing and / or maintaining receptive and expressive speech and language skills. Where appropriate the rehabilitative audiologist should function as a consultant to Hearing Specialists or Teachers of Hard of Hearing or Deaf and be a source of information to them on matters of speechreading, auditory training, and in planning for training.

The training model she presents stresses several features:

(1) Diagnosis of central problems in auditory perception and processing as well as on detection of peripheral lesions; (2) Planning audiology training sequences to alleviate or manage problems in processing (apart from auditory training, which is an integral part of the development of voice, articulation and language skills); (3) Planning beginning voice, articulation and language development on an individualized basis with stress on selection of lexicon most easily heard by the child; (4) Concern with the audiotry or acoustic environment of the child either through modification of room characteristics or through bypassing ambient noise by means of F.M. or loop system; (5) Emphasis on knowledge of

techniques used in reaching profoundly deaf children along with experiences in serving as a Teacher Aid in a self-contained classroom for the deaf (90 hours—3 quarter units). In our new curriculum there will be 13 quarter units of Deaf Ed; 3 units on problems of deafness, 4 units in amplification of linquistic principles and useful teaching machines (e.g. S indicator), 4 units in a course combining singing, finger spelling and cued speech, plus lab experience; (6) Competency based skills as well as knowledge will be guaranteed; hence, considerably more emphasis on clinical and on-the-job experiences than is usual in our training programs.

Dr. Bruce Siegenthaler suggests a model in which we recognize two levels of audiological practice and work to develop these two levels. The levels are:

- Professional—a combination of the features of the present clinical and rehabilitative audiologist.
- 2. Technician—one who has learned to administer routine audiological tests.

The professional audiologist is in charge. He interprets test results and designs programs of rehabilitation. The training of a Professional Audiologist would include elements of present training programs and it should also include major elements of clinical psychology, human development, aspects of medical practice, rehabilitation and acoustics and include an orientation to the notion of accountability.

Dr. Siegenthaler also suggests that the licensing of audiologists is a necessity as well as licensing of the technician. (The Pennsylvania licensing bill, which is in progress, provides for this).

In summary his theme is that the model for training should be for a responsible and accountable professional and this to be accomplished in part by development of an audiologic technician.

Dr. John O'Neill suggests that two models for training should be considered:
1) educational, and 2) medical.

Educational Model

Should involve a program devoting itself to a basic study of communication disorders with major interest in observable aspects of behavior associated with hearing loss and minimal interest in causative factors. He would be trained to manage deviant communicative behavior, and should be involved in research on delivery of services. Also he would be trained in a non-medical setting.

Medical Model

Training and academic work should focus upon:

- a. basic understanding of structures and their functions
- b. diagnostic procedures
- c. interprofessional activities and delivery of services
- d. course work involving some of the same work that students of otolaryngology take up to the point of surgical or chemotherapeutic management.

Drs. Oyer and Kapur suggest a training model for the development of a professional who will take six years of education and training beyond High

School and will achieve a professional doctorate; a Doctor of Audiology, or perhaps a Doctor of Medical Audiology.

The model proposes to blend that which now takes place in first-rate programs preparing what we currently refer to as Clinical Audiology and Rehabilitative Audiology, and adding to this the education and training for otological examination and evaluation.

The model is based upon several assumptions:

- Needs of hearing handicapped are not being adequately met for there are too few professionals to meet the needs.
- With the present delivery of service pattern (medical specialist audiologist—hearing aid dealer as principal agents) there is a real discontinuity of service to the handicapped.
- 3. The audiologist should be that person who "manages" the service to the hearing handicapped who sustain problems of communication.

The first two years of the program would be in general education, to include the basics in chemistry, biology, physics, speech and hearing sciences, and psychology. In year three the student would take language development, basic speech pathology and courses in basic audiology, rehabilitative audiology, and pediatric audiology. In year four the work would center upon gross anatomy, basic physiology and pathology with more audiology, emphasizing industrial, differential, and advanced testing. Year five would include pharmacology, neuroanatomy and neurophysiology of communication systems and acoustic phonetics. In year six the student would rotate through clinical clerkships to include audiology, otolaryngology, pediatrics, neurology, physical diagnosis, psychology, and neurotology. Additionally during this sixth year a field study would be completed. Year seven would be the Clinical Fellowship Year with an audiologist and an otolaryngologist as sponsors.

Whether or not the above model represents the best approach is open to debate. The point being made is that there is need for change in audiology training programs in order to provide for better service to the handicapped. The specialist to be developed under this program is not meant to supplant the otologist, for he would not be involved in medical or surgical interventions.

## Summary

Discussion of the above models by the group appointed to discuss them yielded the following summary statements:

There is need for-

- 1. further in-depth study of the preparation of the practicing audiologist,
- 2. training of a professional audiologist who is skilled in physical examination and identification, audiological evaluation, and aural rehabilitation.
- in-depth research in the area of aural rehabilitation so as to provide a solid foundation for habilitative and rehabilitative procedures,
- 4. study of the characteristics of persons who are rehabilitatively oriented and successful in this area, and
- 5. greater exposure to the deaf in the training of the audiologist.