



Position Paper

The issue of the professional doctorate (Au.D.) as the appropriate entry degree for audiology has been growing in importance and interest. Early efforts were made to produce a document that clearly delineated the Academy's position. This revolutionary concept fostered considerable differences. The ongoing debate produced a series of reports and proposals, none satisfactory to all. It seemed clear, however, that the time was at hand to attempt a resolution of the question and produce a final definitive statement; a position paper that reflected approval and consensus by both the Executive Committee and the Board of Representatives that would have broad acceptance by the membership.

Consequently, at the recent annual Convention of the Academy, President Northern and the Executive Committee appointed an ad hoc committee from the Board of Representatives consisting of Charles Berlin, James Curran, Patricia Nordstrom and Gretchen Syfert. Their task was to produce a document during the Convention utilizing sections of two previously unpublished working papers, as well as other sources. The ad hoc committee's position paper was duly voted on by the Board of Representatives and passed. Because it had been written under time constraints, James Curran and Wayne Olsen were asked to further refine the position paper in terms of style and expression without change to its content.

Subsequently, the Board of Representatives and Executive Committee unanimously passed the final revised document. It is a historically significant paper. It clearly states the Academy and its membership believes in the critical need for improvement in the quality of education that future audiologist-practitioners will receive, and the inadequacy of the present model. It clearly differentiates between education for a Ph.D. and the education required for the Doctor of Audiology degree. It emphasizes the importance of student-practitioners being exposed in depth and breadth to a variety of work settings and role models.

The American Academy of Audiology unequivocally supports the swift initiation of Au.D. programs in university settings. Nothing less than the future of our profession and its involvement in tomorrow's hearing health care delivery systems is at stake.

The American Academy of Audiology and the Professional Doctorate (Au.D.)

Introduction

The American Academy of Audiology endorses the concept of the professional doctorate in audiology as the appropriate entry-level degree for the practice of audiology.¹⁻² The advanced level of training the professional doctorate mandates is necessary to ensure the provision of the highest standards of delivery of service to individuals with auditory and other related disorders and to their families. The professional doctorate establishes audiologists in a clearly defined and prominent role within the hearing health care delivery system and strengthens their position as autonomous practitioners and providers of audiological services.³

Policy Statements

The specific purpose of the professional doctorate in audiology is to prepare highly skilled practitioners. Professional doctorate programs in audiology must significantly exceed the academic and training experiences provided by Master's level programs and provide at least four years training and education after the completion of accredited Baccalaureate work.³ Such programs must demonstrate sufficient depth and breadth to warrant the doctoral designation.⁴ An entirely different degree designation, the Au.D. (Doctor of Audiology), is necessary to describe this professional degree and to differentiate it from the research-oriented Ph.D.

The Academy shall seek to influence academic institutions, federal and state regulatory agencies, fiscal intermediaries, professional organizations and the general public towards the acceptance of the professional doctorate in audiology (Au.D.) as the preferred entry-level degree for the practice of audiology.

Guiding Principles

The focus of an academic doctorate (Ph.D.) is on research culminating in the dissertation for the Ph.D.; the focus of the professional doctorate in audiology (Au.D.) is on the development of clinical proficiency. The Ph.D. is defined as, *the mark of highest achievement in preparation for creative scholarship and research, often in association*

with a career in teaching at a university or college.⁵

The professional doctorate (Au.D.) is, *the highest university award given in a particular field in recognition of completion of academic preparation for professional practice and does not require a dissertation for its completion.*⁵

The primary objective of the Au.D. program is to produce audiologists who are functionally competent in providing the wide array of diagnostic, remedial and other skills and services associated with the practice of audiology. Hence, there is major emphasis on the clinical learning experience. Although the professional doctorate in audiology (Au.D) is not a research-oriented degree, it is imperative that student-practitioners be familiar with the scientific and research literature that undergirds audiology, have the knowledge and the skills requisite to evaluate and interpret the audiological and related research literature, and be able to synthesize and apply pertinent research knowledge to the problems of clinical practice.⁵

Ideally, Au.D. degree programs should be organized and implemented within sponsoring institutions, such as colleges and universities, that will provide for an independent school and faculty and should be constituted similar in nature to the degree programs which grant doctorates in other professions, such as dentistry, medicine, optometry, veterinary medicine, etc. Traditional graduate programs are structured to grant academic doctorates rather than professional doctorates. Consequently, Au.D. programs should be administered whenever possible independent of existing graduate school programs.⁶ They should be practitioner and patient-service driven, i.e., the basic orientation of the training programs should be to facilitate the development of the highest level of audiological skills in the student-practitioner, with concomitant emphasis on delivery of superior audiological services to the patient.

Considerable responsibility falls upon the clinical and academic faculty. It must be large and diverse enough to represent to the student-practitioners the leading edge of hearing care skills and services. Didactic instruction should focus on direct application of audiological sciences to hearing care needs.⁴ The faculty and the sponsoring institution will have the ultimate responsibility to evaluate formally the student-practitioner's progress and to assess the student-practitioner's mastery of the program's content, pursuant to the awarding of the Au.D. degree.

The AAAudiology is fully aware the implementation of the professional doctorate in audiology (Au.D.) contains significant challenges and departures in audiological education, and will foster and seek cooperative effort between itself and degree granting institutions to develop programs jointly acceptable to the AAAudiology and related professional organizations.

The Clinical Training Program

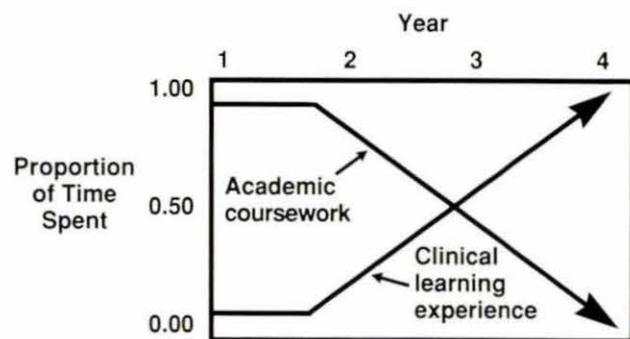
The Au.D. educational process assumes development of broadly based clinical rotations based on substantive academic achievement. The preparation of the complete practitioner rests upon three essential foundations:

- Mastery of the audiological knowledge base (See Appendix)
- Extensive clinical experience and rotations
- Role modeling based on exposure to experienced, practicing clinicians

It is recommended that the student receive between 2500 and 3000 hours of clinical experience with an extensive variety of cases and preceptors. Student-practitioners should be exposed extensively to diverse and challenging clinical populations. Appropriate clinical training environments should include but not be limited to:

- Audiology/Medical practices
- Autonomous private practices in audiology
- Community clinics
- Hospitals
- Industrial settings
- Local education agencies
- Schools for the hearing-impaired
- University or college clinics

At least four separate rotations from the above list are recommended as a minimum as the student progresses through the program of study. The process of clinical experience should evolve in scope and complexity from limited clinical exposure with close supervision during the first years, to fourth year independent status. Whereas the first two years of the program are heavily weighted towards didactic classes and laboratory coursework, emphasis during the second two years shifts to clinical learning experiences.⁴ The proportion of clinical learning experiences as compared to academic instruction during the professional doctorate (Au.D.) program is depicted below.



Position Paper Continued

Appendix

The intent of this section is to specify general areas of study which are considered essential to the knowledge base of the audiologist-practitioner.⁷ It is understood that the exact specification of curriculum and emphasis is the responsibility and properly the domain of the educational institution that offers the Au.D. degree. As in most professional degrees, a basic science core is essential. This core can be provided by basic science faculty from other departments and schools within the degree granting institution. The following general areas of study are recommended.

Basic science areas include:

- Physics of sound, acoustics, psychoacoustics
- Research methods and statistics
- Speech science and perception
- Computer science
- Electronics, instrumentation and calibration
- Gross anatomy, neuroanatomy and neurophysiology
- Anatomy and physiology of hearing
- Diseases and pathologies of the ear and nervous system
- Related medical diagnosis and treatment
- Embryology and genetics
- Clinical pharmacology
- Epidemiology
- Radiographic techniques and imaging

General areas of professional instruction include:

1. Audiologic assessment
 - Case history/interview techniques
 - Physiologic measurements
 - Electrophysiologic measurements
 - Behavioral tests of auditory function
 - Communication measurement scales
2. Medical considerations
 - Audiologic manifestations of ear disease
 - Clinical diagnosis and evaluation of auditory pathology
 - Clinical decision analysis
3. Clinical decision process/counseling
 - Counseling strategies and techniques
 - Referral procedures and case management
 - Interprofessional relationships and responsibilities
 - Personal and interpersonal dynamics
4. Professional issues
 - Ethical/legal/quality improvement issues
 - Fiscal intermediaries/government agencies
 - Practice management/healthcare marketing
 - Forensic audiology

5. Conservation of hearing and prevention of hearing loss
 - Public and consumer education
 - Hearing conservation models
 - Identification and screening models
 - Federal/state regulations
 - Worker's compensation issues
6. Special populations
 - Pediatric audiology
 - Geriatric audiology
 - Difficult to test, including developmental disabilities
7. Audiologic habilitation and rehabilitation
 - Normative developmental models
 - Auditory training
 - Visual communication, including speech reading
 - Manual communication systems and skills
 - Speech and language of the deaf and hard of hearing
 - Educational management
8. Management of amplification
 - Physical and electroacoustic characteristics of amplifying devices
 - Methods of evaluation
 - Rehabilitative procedures
 - Dispensing
 - Assistive devices
 - Implantable devices
9. Vestibular evaluation
 - Techniques and procedures
 - Rehabilitative strategies

—Denver, April 28, 1991



References

1. Jerger, J., *Audiology Today*, VI, #1, 1988, pp. 1-14.
2. Position Statement on Graduate Education in Audiology, in *Graduate Education in Audiology*, Appendix C, *American Academy of Audiology*, April 24, 1990.
3. Task Force on the Professional Doctorate, Report to Executive Committee, *American Academy of Audiology*, February 6, 1990.
4. Conference on Professional Education, *Proceedings of the Academy of Dispensing Audiologists*, Chicago, October 9, 1988, p. 15.
5. Final Report of the Ad Hoc Committee on Doctoral Education, *Council of Graduate Programs in Communication Sciences and Disorders*, March 7, 1991.
6. Goldstein, D. and Binnie, C., The Doctor of Audiology Degree (Au.D.) and Professional Education, *Audiology Foundation of America*, November, 1990, pp. 8-11.
7. Position Paper, Guidelines for Professional Doctoral Training, *American Academy of Audiology*, January 29, 1991.