AuD Degree

The Doctoring Degree in Audiology

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orn in academia, audiology has a history dissimilar from other independent health care professions. Rooted within the university system, it is still working its way into clinical practice. Most other health care professions, on the other hand, were practiced long before they were institutionalized. Audiology now finds itself needing a stronger clinical base, a base that can properly prepare students for actual practice, a direct service role, and an independent professional status.

Current educational programs for audiology students do not allow them to earn a professional degree. The Master of Science or Master of Arts degree, the entry level for professional practice in audiology, is an academic degree. About 11% of practicing audiologists have a PhD degree—also an academic degree.

That the PhD degree is an academic rather than professional doctorate may seem to be a minor distinction, but the distinction is crucial. It prohibits audiologists from tagging that very important AuD (Doctor of Audiology) behind their name, the expected title of one who is providing a doctoring service. Physicians are doctors of medicine (MD), dentists are doctors of dentistry (DDS), optometrists earn the title through their OD degree, animal doctors are called DVMs. Like physicians, dentists, optometrists, and veterinarians, audiologists are health care professionals who deserve a professional degree with its associated obligations and opportunities.

Audiology holds a unique position among the health care professions. Medical school, dental school, optometry school, veterinary school—all have a similar educational structure. But the program for audiology students is entirely different. The difference is not inherently wrong—as long as it works. The recurring dissatisfaction with audiology education, however, is a strong signal that something *is* wrong. Perhaps the educational programs of the other health care professions *do* merit a second look.

In audiology, the bachelor's degree is a preprofessional degree. Nevertheless, professional coursework and experience is extensive—learning some audiometry, studying disorders, doing a little therapy. At the master's level (a professional program), research coursework and experience are integrated—encouraged by degree options, professorial inclinations, accreditation standards, and certification suggestions. PhD students, who should be concentrating on research, take professional coursework as well as

some basic training.

The current model was questioned as early as 1963 at the Highland Park Conference (ASHA, 1963) and as recently as 1987 by Aronson. Pressure to excel and to provide competent practitioners has had an impact on audiology education. But rather than change the structure of programs to accommodate the ever-increasing need for diversified education, classes have simply been shifted around either into the bachelor's degree program or into the PhD program. The result is an MS program that is bursting at the seams.

Within that two-year program (at some universities, only a one-year program) students must acquire all the knowledge and skill needed to successfully practice audiology. As the need for knowledge and skill grows, so does the need for additional classes. The one thing that does not grow is the time-frame for the MS program. So where does the time come from for additional classes? It's stolen—stolen from the bachelor's program and stolen from the PhD program. Furthermore, the educational system lacks a formal entry point that requires standards of competency in mathematics, physics, chemistry and biology—sciences as vital to audiology as to medicine, dentistry, and optometry. Thus, information needed by MS students is presented to bachelor's students who lack the basic education in science necessary to understand and apply the professional material. Other material is pushed upward into the PhD program.

Professional coursework in the PhD program jeopardizes the integrity of the PhD degree. Scholarship is the result of individual dedication, devotion, practice, and skill. The PhD program is, by definition, an elite course of study—only selected people are admitted to these programs and only highly qualified people conduct its activities. That is the way it should be. When the "fine art" of research is muddied up by practice-minded students, concentration and product quality are diminished. Audiology PhD programs, however, are filled with students who are there because they want the advanced professional training that can be achieved only at that level (ASHA, 1978). When they graduate and head for clinical practice, research is the furthest thing from their minds and usually never pursued in their working life.

Time, money, and energy is expended in a research program on students who are not interested in research at all. Furthermore, the extreme flexibility of the research degree program, its highly individualized nature, and the long hours of laboratory effort and professor guidance inherently limit the number of students who can be graduated—a situation that works against the need for more audiology practitioners (Goldstein, 1984; Goldstein, 1988).

Deficiencies can be found at the other end of the audiology program as well. Students in the bachelor's program are not prepared for the clinical science or professional coursework they will encounter. Professors find they must water down information for

students who lack basic scientific knowledge. Because students never learn the basic concepts in the first place, they must be taught the same things many times over, often throughout the PhD program. For example, audiology students learn chemistry at the same time they are expected to understand the chemical basis of certain audiological disorders. More imaginative and fruitful solutions to these problems are possible only if we can step back from our comfortable, habitual assumption and dare a new perspective. Figure 1 offers a new perspective on professional education in audiology. The left side of the figure shows the current education model. The bachelor's degree is followed by the master's degree. Most students go into practice, but few go on for the PhD degree. This model may remain the same for speech-language pathology. It is suitable for the student wishing a career as a research scientist who intends to pursue the PhD degree. In this sense, it is analogous to the education of a molecular geneticist or historian (whose laboratory may be the library). This path is also appropriate for those interested in human communication sciences or linguistics, for example.

The right hand side of Figure 1 shows an alternative to our current model of audiology education¹. After a two-year minimum of pre-audiology education, a student can apply to the professional audiology program. There will be a fixed number of places for each year of the four-year professional program, standard practice in professional schools of medicine, dentistry and optometry.

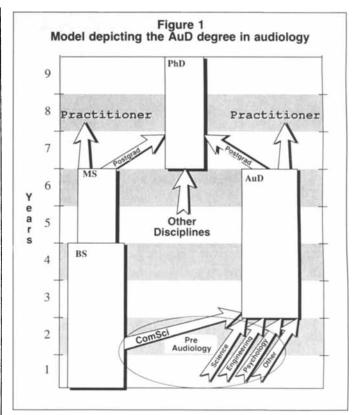
Students will be recruited from a variety of academic areas, such as human communication sciences, psychology, science, engineering, agriculture, or management, among others. Application will be open to students who have completed specified coursework in mathematical, physical, and biological sciences, as well as other areas of undergraduate education. In addition to academic grades and other measures, certain personal attributes of the applicant will be judged: first-choice career interest in audiology practice, evidence of understanding of and commitment to audiology practice, the report of a practicing audiologist who interviewed the candidate in depth, evidence of good written and oral communication skills, and evidence of the stamina needed to complete the demanding four-year professional curriculum.

Audiological science will predominate during the first year or two of this 48-month program. Site of lesion testing and diagnosis and treatment of communication disorders will dominate during the third and fourth year. Clinical education, beginning gradually during the second year, will intensify significantly in the third year and represent 85% of the student audiologist's efforts by the fourth year.

The vast majority of these graduates will go into audiology practice. Graduates will have the knowledge and skill as well as the legal and attitudinal readiness to enter practice. They will have the experience and ability to provide the broad array of services comprising the profession of audiology. Should specialty training in audiology be desired, a post-graduate education might be pursued. A small number of these audiologists may choose a career as a research scientist and pursue the PhD degree.

The advantages of this model are apparent. It allows for a solid foundation in science before students undertake a professional education. The continuous nature of this 48-month program allows education to be logically structured. Not only does it allow more time to arrange coursework realistically, but it also allows more time for the learning experience. The proposed model will result in over 2,000 hours of clinical practice. The model meets or exceeds existing licensure requirements regulating audiology, although some changes in the language of licensure laws may be necessary.

This model also parallels the educational approach used in the three largest and most successful health care professions in this country—medicine, dentistry, and optometry. The similarity will help sell the concept to university faculty and administrators, and also to



students. Coupled with demonstrable professional rewards, this model will make the field of audiology competitive in recruiting the brightest and best young students.

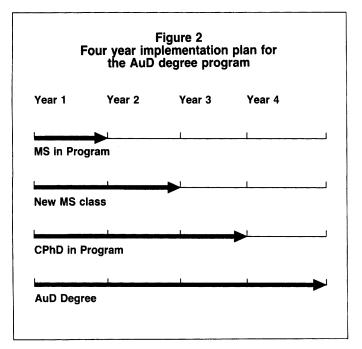
The two-year minimum pre-audiology program will attract students from various disciplines who have demonstrated technical strengths but prefer a people-oriented career. It will eliminate the need to introduce clinical/professional matters into undergraduate coursework. This reorganization will help promote human communication sciences as a general interest body of knowledge throughout the university. Outside the university, the proposed model will satisfy complaints heard from existing practitioners who must provide extensive education (even in basic skills) as well as supervision for graduates because of their limited preparation in the master's program—even with young audiologists technically licensed to practice.

When students in other health care professions graduate, they are more or less ready to hang their shingle on the door and take the business that comes in. Not so for audiology graduates. They spend the next 10 years learning what they should already know. Not surprisingly, this scramble to catch up leads to low self-esteem, which in turn affects the quality of care given, the ability to exercise judgment in matters of treatment, the assertion of autonomous status in audiological matters, and the practice of interprofessional relations.

The AuD degree, audiology doctor, places its holder on a par with others holding doctoring degrees. Medicine, dentistry, and optometry have long been recognized for their explicitly professional education programs that terminate in a doctor's degree. The public benefits from the quality of care made possible by such programs. In turn, the professions enjoy recognition, acceptance, prestige, and economic rewards.

Another benefit of the AuD degree would be refocusing the PhD degree to prepare research scientists. The PhD degree is not discipline-specific. Its focus is on preparation for research. For human communication sciences to advance its knowledge base, it must demand that its PhD programs be as rigorous and demanding as, for example, a PhD in biochemistry or English

¹A detailed plan and curriculum for this educational model can be obtained by writing to the author.



literature. Diluting a PhD program with professional education does not advance this goal. Dividing intellectual and material resources among a large number of students, only some of whom possess true commitment to research, does not advance this goal. Lofty phrases such as clinician-scientist or clinical leader do not advance this goal. Only a laser-like focus on the enormous effort required to advance our state of knowledge can advance this goal.

The AuD degree program can be implemented over a period of

four years in universities that offer a two-year MS program Figure 2). The normal graduation rate will continue until the fourth year, at which time only AuD students would be finishing their degrees. The university would cease to accept traditional MS in audiology or clinical PhD students after the first year that the new AuD program is initiated. Of course, the university will continue to accept MS and PhD students in communication sciences who wish to pursue that career.

Audiology is a doctoring profession. It needs and deserves its own doctor's degree. A plan has been advanced that promises to be beneficial to our profession as well as to the public we serve. It meets or exceeds current licensure requirements and can be implemented without serious disruption to existing educational programs. The Academy of Dispensing Audiologists has adopted this model as worthy of its support. It is my hope that other professional organizations will follow a similar course. Strong existing university programs are in the best position to launch this new degree program. But given the demographics (three times as many people with hearing impairments as with visual impairments, but three times as many optometrists as audiologists), institutions without existing programs might also consider such a program.

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