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Final Report

Report of the Academic Affairs Board on Critical Issues in AuD Education

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I. Introduction

In 2014, the ASHA Board of Directors (BOD) asked the Academic Affairs Board (AAB) to identify critical issues associated with the current doctor of audiology (AuD) education model and to make recommendations about how best to evaluate the effectiveness of the AuD model in light of the recommendations from the 2013 Ad Hoc Committee on Reframing the Professions.

The Reframing Committee was charged to identify specific elements that reframe the professions of speech-language pathology and audiology to meet the changing needs in both the health care arena and educational settings. The Reframing Committee specifically addressed audiology education in its report and recommended that members in higher education continuously analyze external market changes and adjust the curriculum and clinic models accordingly. The Reframing Committee further noted that the AuD model has been around for approximately 20 years; not only is it timely to evaluate the model because of health care changes, but also because it is a relatively new model and periodic reviews are healthy to determine if changes are needed and/or to evaluate the impact on new graduates, the field itself, other professionals, and all consumers. Lastly, given that audiology is one of many clinical doctorates that have arisen over the past 20 to 30 years, evaluation may be informed by what others have learned.

The Reframing Committee itself identified several needs, questions, and concerns related to the AuD model of education, including the following:

- Interventional audiology in AuD curricula (i.e., prevention, early detection, and noninvasive alternatives to treatment, particularly as they relate to chronic health care conditions, such as heart disease and diabetes)
- Number of students entering the field (e.g., What level/degree of growth is needed to sustain the profession? Can we attract high quality students to the field?)
- Return on investment (ROI) for an AuD degree (e.g., consider the need to evaluate the cost of increasing professional education requirements, the disconnect between education cost and salary and reimbursement, and whether the educational costs are keeping minorities from entering the profession)
- Meeting student needs (e.g., Has there been a substantive change in training relative to the master's degree? Are students adequately prepared for the new and evolving health care environment?)
- Meeting consumer needs (e.g., Are we serving consumers more effectively? Do consumers need better access to our services?)
- Requirements/accreditation or regulations (e.g., What encompasses the 4th year or the type of facility where the students are placed?)
- Interprofessional education (e.g., Are we teaching students how to provide services that are patient/family centered, community/population oriented, relationship focused, and outcomes driven?)

II. Critical Issues Identified by the Academic Affairs Board

The Academic Affairs Board reviewed and discussed available data, reports, and resources related to AuD education (see list of references at the end of this report) and identified the following critical issues that the BOD may consider in addition to those already identified by the Reframing Committee. The resources covered a broad range of topics and originated from multiple sources/organizations associated with audiology and audiology education. It is the opinion of the AAB that sufficient data and information were available to draw conclusions about the strengths and current challenges of AuD education. The Committee determined that soliciting additional survey or other data was not warranted in order to fulfill the purpose at hand—that is, to identify critical issues associated with the current model of AuD education. The critical issues identified below are presented in order from most to least important based on Committee consensus.

1. **Model of AuD Education**

   The current model of AuD education is predominantly a 4-year graduate education program completed following a bachelor's degree, resulting in an 8-year education model to enter the profession of audiology. There is a need to evaluate the AuD education model with respect to the requisite program to qualify as a "doctoring" profession relative to other clinical doctoral professions and the impact of program length on recruitment into the profession. Additionally, academic programs have consistently expressed challenges about implementing a full-time, 9- to 12-month clinical externship as part of the AuD model of clinical education.

   a. Is there a more cost-effective educational model for the AuD degree (e.g., a 3-year program, a 2-year UG prep + 3-year AuD program = 5 years, etc.)?
   b. Is there an alternative to the full-time externship model as part of the degree program?
   c. Would a residency experience after the AuD degree has been awarded be a good fit for AuD education?
   d. How would a residency model impact clinical education?
   e. Would an alternative clinical education model increase capacity for educating more audiologists?

2. **Reframing the Profession of Audiology**

   There is a need to identify new knowledge and skills that will be required of audiologists to succeed in a changing landscape for health care, reimbursement, hearing technology, and service delivery.

   a. What are the knowledge and skills that will be required of audiologists as a result of a changing health care economics landscape?
   b. How can these knowledge and skills be incorporated in AuD education and evaluated?

3. **Interprofessional Education and Interprofessional/Collaborative Practice (IPE/IPP)**

   The delivery of services via interprofessional collaborative teams has become increasingly important within health care and education settings. AuD students will need to acquire the

interactive skill set associated with effective team-based care (e.g., collaborative leadership, co-facilitation, reflective practice) via interprofessional education opportunities provided within the AuD education model.

a. How can interprofessional education be infused into AuD education?
b. How do we prepare AuD students for interprofessional collaborative practice?
c. How can we assess the acquisition of IPE/IPP knowledge and skills?

4. Best Practices in Pedagogy for Clinical Education

Learning opportunities for educators need to be strengthened and expanded to encourage best practices in pedagogy for clinical education across AuD programs.

a. What recommendations should be made to ensure clinical educators acquire the skill set required in university programs?
b. What recommendations should be made to ensure clinical educators in off-campus clinical sites acquire the required skill set?
c. What recommendations should be made to ensure AuD students acquire the necessary skills to supervise audiology support personnel and to understand the process involved in serving as clinical preceptors themselves?

5. Recruitment and Retention of PhD Faculty for AuD Programs

There is need for a strategic and consistent effort to recruit audiology students for PhD programs in order to sustain a sufficient pipeline and workforce supply of PhD-level faculty-researchers to teach in AuD programs and contribute to the science of the discipline.

- A total of 263 searches were conducted for faculty in the 2012–2013 academic year (see Table 38). Of these, 56 searches were conducted for audiology faculty, 185 for speech-language pathology faculty, 5 for hearing sciences faculty, and 16 for speech and hearing sciences faculty.
- Of first year audiology research doctoral students, 40.9% enrolled while simultaneously enrolled in a clinical doctoral degree program (e.g., AuD/PhD), 18.2% enrolled after practicing 5 or fewer years in the profession(s)/discipline, and 11.4% enrolled immediately following the receipt of a clinical doctoral degree or master's degree (see Table 17).

Council of Academic Programs in Communication Sciences and Disorders and the American Speech-Language-Hearing Association. (2014). *CSD Education Survey National Aggregate Data Report*: *2012–2013 academic year*. Retrieved from www.asha.org and www.capcsd.org.

a. How are AuD students being recruited for PhD programs?
b. What more can be done to encourage audiology students to enter PhD programs?

6. Supply of and Demand for Audiologists Nationwide

Bureau of Labor Statistics (BLS) projections indicate faster than average growth (34%) for the profession of audiology through 2022; 4,300 additional audiologists will be needed to meet

workforce demand. Additionally, pipeline data collected via the CSD Education Survey show the median student capacity for audiology programs has remained between 10 and 12 in the last 5 years, ranging from 5 to 28 in the most recent academic year (2012–2013). First year enrollment over student capacity for audiology clinical doctorate entry-level programs has averaged 90.8% between 2008–2009 and 2012–2013, indicating that AuD programs are operating near capacity. Total enrollment for audiology clinical doctorate entry-level programs reached 2,579 in the 2012–2013 academic year, a 4.0% change over 2011–2012. The number of audiology clinical doctorate entry-level degrees granted increased from 502 in 2008–2009 to 610 in 2012–2013, a 21.5% change. The increased graduation rate may be due to better retention of AuD students, as the number of AuD programs remained stable, at 74, during the same time period and total enrollment increased by only 4%.

Based on ASHA year-end counts (www.asha.org/research/memberdata/), the number of ASHA-certified audiologists has averaged about 12,850 over the last decade, remaining relatively consistent from year to year. According to BLS data, 10,030 audiologists were employed in May 2003 (www.bls.gov/oes/2003/may/oes291121.htm), and 11,550 were employed in May 2013 (www.bls.gov/oes/current/oes291181.htm)—a 15% change over the last decade.

Note: The discrepancy between the number of audiologists reported by ASHA and the number reported by BLS may be attributed to the fact that not all ASHA-certified audiologists are currently employed (e.g., some are retired).

a. How do we address the need to train more audiologists and reduce attrition?
b. What is the role of the continuum of service delivery (e.g., practicing at the top of the license, telepractice, use of audiology assistants) in meeting workforce demands for audiologists and audiology-related services?

7. Prerequisites for Entering AuD Programs

Based on a random sampling of 80 undergraduate CSD programs—which sampling represents one third of all programs, there is wide variability in prerequisite requirements for admission to AuD programs, ranging from none to five or six courses.

a. Are prerequisites necessary for admission to an AuD degree program?
b. Are certain courses required in addition to the AuD curriculum for students entering an AuD program without a background in communication sciences and disorders?
c. What is the impact of prerequisites on access and accountability for professional education, time-to-degree, and student debt load?
d. Is there an ideal or uniform set of prerequisites to prepare students for successful audiology education and careers? If so, what are they?

8. Expected Research Productivity of AuD Audiologists

The expected outcomes of clinical doctors of audiology (AuD) for research activity inform the type and degree of research experiences to incorporate in AuD education programs.

a. What kinds of research activity do we expect audiologists to conduct or engage in as AuD-educated audiologists?
b. What are the research competencies necessary to engage in the recommended activities?
c. How can these experiences be incorporated in AuD education?

9. Clinical Educators

Clinical education is a critical component of AuD education. There is a wide variation in the positions held by these individuals at institutions of higher education, ranging from staff positions with no opportunity for promotion or tenure to clinical-faculty-track positions that offer a promotion track and/or a tenure track.

d. Is there value in promoting clinical-faculty tracks with tenure and/or promotion opportunities in higher education?
e. Would this enhance the recruitment and retention of clinical educators in AuD programs?

Other Identified Issues

It should be noted that the AAB identified and discussed additional items often raised as "critical" to AuD education. The following issues were not included in the list above primarily because AAB members were not in agreement as to the importance of the issues, or it was determined that there was not sufficient evidence to support including the issues.

1. Sufficiency of Clinical Placements

Some audiology programs have suggested that the availability of clinical placements in audiology is a significant challenge. This may be related to CFCC standards that require clinical educators to hold the CCC when supervising students who plan to apply those hours toward ASHA certification. However, available data from the CSD Education Survey indicated that clinical placements are considered a major or moderate issue for less than one fourth of AuD programs.

- For academic year 2012–2013, 4.4% of AuD programs reported insufficient clinical placements as a major factor and 16.2% reported it as a moderate factor impacting enrollment.
- For AY2011–2012, 7.4% of AuD programs reported insufficient clinical placements as a major factor, and 11.8% reported it as a moderate factor impacting enrollment.

2. Student Funding

One third of AuD programs reported that student funding was a contributing factor impacting enrollment of students in their programs.

- For AY2012–2013, 13.4% of AuD programs reported student funding as a major factor, and 20.9 % reported it as a moderate factor.

- For AY2011–2012, 14.7% of AuD programs reported student funding as a major factor, and 26.5% reported it as a moderate factor.

Sources for data on sufficiency of clinical placements and student funding:

Council of Academic Programs in Communication Sciences and Disorders and the American Speech-Language-Hearing Association. (2014). *CSD Education Survey National Aggregate Data Report*: *2012–2013 academic year*. Retrieved from www.asha.org and www.capcsd.org.

Council of Academic Programs in Communication Sciences and Disorders and the American Speech-Language-Hearing Association. (2013). *CSD Education Survey National Aggregate Data Report*: *2012–2013 academic year*. Retrieved from www.asha.org and www.capcsd.org.

III. Recommendations

The Academic Affairs Board has determined that the AuD model of education should be evaluated by a critical mass of stakeholders representing academic and clinical educators, practitioners, employers, and consumers. This conclusion is warranted in light of the questions and critical issues about the AuD model of education identified by both the Reframing Committee and the AAB, the fact that it has been more than 20 years since the advent of the AuD model, and because it has been 8 years since ASHA as an organization convened a group of stakeholders to discuss the state of audiology education.

The AAB recommends that the ASHA Board of Directors accept this report and convene a planning committee to outline a plan, budget, stakeholder groups, and deliverables for a future summit on audiology education.

IV. References Reviewed for This Report

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