Audiology Education Summit II: Strengthening Partnerships in Clinical Education

February 3–5, 2006
Phoenix, Arizona

CONFERENCE REPORT

Sponsored by:
- American Speech-Language-Hearing Association
- Council on Academic Accreditation in Audiology and Speech-Language Pathology
- American Academy of Audiology
- Council of Academic Programs in Communication Sciences and Disorders
Executive Summary

Through a joint initiative of the American Speech-Language-Hearing Association (ASHA), the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA), the American Academy of Audiology (AAA), and the Council of Academic Programs in Communication Sciences and Disorders (CAPCSD), the conference “Audiology Education Summit II: Strengthening Partnerships in Clinical Education” was held on February 3–5, 2006, at the Wyndham Phoenix Hotel in Phoenix, Arizona.

This 2½-day Summit assembled academic and clinical educators from clinical doctoral programs in audiology and representatives from clinical facilities and professional organizations. The purposes of the Summit were to (1) identify and address current and emerging issues in clinical education in clinical doctoral programs, (2) propose a set of quality indicators of clinical education that contribute to developing skilled professionals and that can be used by clinic placement sites and academic programs, and (3) share resources and tools. The Summit was designed to allow participants to reach general levels of agreement on the characteristics of clinical doctoral programs in audiology that would optimally prepare students to become desirable, employable professionals. Although the process used to reach agreement was structured in advance, there was no attempt to predetermine specific conference outcomes.

The Summit focused on five major topic areas: Core Areas in Audiology Education, the Value and Challenges of Clinical Externships, Selection of Clinical Sites, Student Preparation Before Clinical Placements, and Student Evaluation During Clinical Placements. Individual speakers and panelists made brief presentations on each of the topic areas to provide an overview of the issue and to pose questions to the conference participants. Following each presentation, the participants were divided into small breakout groups, which were predetermined to achieve a balance of academic faculty, clinical faculty, clinical practitioners, small and large institutions, and various work settings. The groups were asked to address specific questions related to the topic that had just been presented.

Conference participants were able to agree on many common elements or characteristics related to clinical education and the preparation, supervision, and evaluation of students. These areas of agreement are described within the full conference report along with the salient discussion that occurred during the decision-making process. At times, some conference participants did struggle to understand the specific task for the breakout discussions. For example, the delineation of “core skills” was difficult for some groups until it was clear what criteria would be used for inclusion in the “core” and what would be listed outside the core, as described further in that section below. On the other hand, the discussions about the other four topic areas were less problematic because the task was more straightforward. However, most groups experienced some level of difficulty because many of the topics discussed included some debatable or controversial issues. Nevertheless, on many issues related to quality doctoral education in audiology, the general level of agreement among conference participants was notable. Where there was not general agreement, it is so noted in the discussion summary.
Introduction

In light of the expanding scope of practice for the profession of audiology, the increasing need for hearing health care services, and changes in the requirements for entry into professional practice in audiology, it is critical that the audiology community examine all components of the academic and clinical education and preparation of audiologists at the doctoral level. Thus, through a joint initiative of the American Speech-Language-Hearing Association (ASHA), the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA), the American Academy of Audiology (AAA), and the Council of Academic Programs in Communication Sciences and Disorders (CAPCSD), the conference “Audiology Education Summit II: Strengthening Partnerships in Clinical Education” (Summit) was held on February 3–5, 2006, at the Wyndham Phoenix Hotel in Phoenix, Arizona.

This 2½ day Summit was designed to assemble academic and clinical educators from university clinical doctoral programs in audiology and representatives from clinical facilities and related professional organizations to identify and describe indicators of quality for clinical doctoral education programs. It was hoped that a reasonably high level of agreement could be reached on the quality indicators.

The conference participants (Appendix I) included 120 individuals representing approximately 64 education programs, 24 clinical sites, students (2 student representatives), and the Summit co-sponsors. Invitations to the Summit were extended to the following groups, organizations, and facilities:

- All audiology program academic and clinic directors
- Educational audiologists in large school systems
- Major hospitals and student clinical sites
- National Council of State Boards of Examiners for Speech-Language Pathology and Audiology
- ASHA Special Interest Divisions 6 (Hearing and Hearing Disorders: Research and Diagnostics); 8 (Hearing Conservation and Occupational Audiology); 9 (Hearing and Hearing Disorders in Childhood); 10 (Issues in Higher Education); and 11 (Administration and Supervision)
- Academy of Dispensing Audiologists
- Academy of Rehabilitative Audiology
- Accreditation Commission for Audiology Education
- Educational Audiology Association

Summit Purposes and Goals

The purposes of the Summit were to (1) identify and address current and emerging issues in clinical education in clinical doctoral programs, (2) propose a set of quality indicators of clinical education that contribute to developing skilled professionals and that can be used by clinic placement sites and academic programs, and (3) share resources and tools. The Summit was designed to allow participants to reach general levels of agreement on the characteristics of clinical doctoral programs in audiology that would optimally prepare students to become desirable, employable professionals.
Background and Summit Planning

This conference was a follow-up to “Audiology Education Summit: A Collaborative Approach,” which was held on January 13–15, 2005, at the Westin Hotel in Fort Lauderdale, Florida. At the close of that conference, there was general agreement among the Summit participants that it was important to convene additional meetings in the future to continue discussions on certain of the outstanding topics for which there was either not sufficient time to address or on which general agreement was not reached. Of particular interest and concern were issues related to the clinical education experiences required of clinical doctoral audiology students. Specifically, participants requested a future conference that would be designed to explore and address issues related to characteristics of quality clinical sites, qualifications of preceptors or supervisors at those sites, student stipends, credentialing, and so on.

In response to that expressed interest, the three sponsoring organizations of that Summit (CAA, ASHA, CAPCSD) agreed to continue to pursue their work in this area and to conduct an Audiology Education Summit II in early 2006, with a specific focus on these clinical issues. The American Academy of Audiology (AAA) also agreed to participate in the planning for this second conference. Thus, an advisory committee (Committee) was established to include three representatives each from ASHA, CAA, AAA, and CAPCSD. Each of the named organizations identified representatives to be members of the Committee and included the following (see Appendix B):

Dennis Burrows, Committee Chair (CAA)  Lisa Lucks Mendel (CAPCSD)
Arlene Carney (CAA)     Dianne Meyer (CAPCSD)
Stephanie Davidson (ASHA)    Craig Newman (AAA)
Neil DiSarno (CAPCSD)    Colleen O’Rourke (CAA)
Vic S. Gladstone (ASHA)    Neil Shepard (ASHA)
Lisa Hunter (AAA)     Patti Tice (ASHA Staff ex officio)
Patricia Kricos (AAA)

The final topics of discussion at the conference and the definition of the final purposes of the conference were the responsibility of the Committee. The advisory committee had three face-to-face planning meetings and a series of conference calls in 2006 to plan the format and design of the Summit and to identify specific topics and questions to be addressed at the conference. The ASHA National Office staff assisted in the logistics for the meetings of the advisory committee and the conference, and ASHA supported the activities by providing funding to cover expenses for the members of the Committee at the meetings and the conference itself, and by providing a meeting location for each of the three planning meetings. ASHA also provided support for the conference to include advertising and registration organization, record keeping, and the production of the conference report with the assistance of the advisory committee.

Summit Format and Design

The Committee developed an agenda for the 2½ day Summit (see Appendix A) that included invited presentations, panel discussions, small breakout sessions, and large group discussions. A professional facilitator was engaged to provide overall direction and facilitation during the entire meeting. The length of the conference allowed time for discussing designated topics and reaching general levels of agreement within small groups and plenary sessions. ASHA and AAA continuing education credits also were offered to attendees who were present for the entire conference.
The Summit opened with a session to present a broad overview of the purpose of the conference and the expected purposes for the meeting; to review the historical information about the various activities, discussions, and conferences that have been held since 1987 regarding the development of clinical doctoral education in audiology; to discuss the evolution and redesign of the profession of audiology during that time; and to place the conference within this context.

The advisory committee had determined to limit the content of the conference to five major topic areas: Core Areas in Audiology Education, the Value and Challenges of Clinical Externships, Selection of Clinical Sites, Student Preparation Before Clinical Placements, and Student Evaluation During Clinical Placements. The committee had invited individual speakers and panelists to make brief presentations on each of the major topic areas to provide an overview of the issue and to pose questions to the group to stimulate their thinking and “whet their appetite” for the subsequent small group breakout sessions. Following each presentation, the participants were then divided into small breakout groups, which were predetermined to achieve a balance of academic faculty, clinical faculty, clinical practitioners, small and large institutions, and various work settings. The groups discussed specific questions related to the preceding invited presentation, randomly assigned to each group, which were developed by the advisory committee for each topic area (see Appendix D for a list of the breakout group assignments). Each group was assigned a facilitator and a recorder who had received specific training the evening before the conference on the process to be followed during the breakout sessions. The decision-making process followed during the breakouts and the large group sessions is described in the following section of this report.

The conference also included an opportunity for attendees to participate in roundtable discussions at the close of the first day of the meeting during the Clinical Education Exchange: Resources and Models. This session provided a venue for participants from academic programs and clinical sites to share innovative and effective solutions to the issues and challenges of educating and mentoring audiology clinical doctoral students. Presentations were required to include content that supported the main themes or topic categories of the conference. The format for the Clinical Education Exchange was a series of three, 25-minute roundtable sessions conducted during a 2-hour period. Each roundtable session included a 10–15-minute informal presentation followed by discussion with colleagues who joined that table. The roundtable sessions were repeated three times during the 2-hour period. Attendees had the opportunity to rotate to a different table every half-hour and participate in at least three roundtable sessions during the entire Clinical Education Exchange. A total of seven different topics were presented by individuals and organizations during this session (see Appendix H), which were well attended and received by the attendees.

**Decision-Making Process**

The conference was designed to achieve general levels of agreement on characteristics of clinical doctoral programs in audiology that would optimally prepare students to become desirable, employable professionals. Although the process used to reach agreement was structured in advance, there was no attempt to predetermine specific conference outcomes. The process was designed to promote and encourage general levels of agreement within defined breakout sessions and plenary sessions.

The steps followed during each of the breakout sessions are described below. Approximately 1 hour was allowed for each of the breakout discussions. Depending on the specific questions asked, participants may have been asked to agree or disagree with information presented, to identify
solutions to challenges, or to identify essential characteristics related to the preparation, supervision, and evaluation of students during clinical placements.

- Under the direction of a facilitator, small breakout groups (12–15 members each) brainstormed to list characteristics or indicators that addressed the specific predetermined questions. Each group named a scribe to list the characteristics on a flip-chart and a time-keeper to keep the group on schedule and complete the assignment. The Facilitator helped to maintain control of the discussion and to summarize all comments for the recorder to write on the flip-charts. Facilitators had at their disposal specific subquestions, which the Advisory Committee had developed related to each main question, to use to prompt or stimulate discussion, as necessary. They were instructed to encourage participants to share any ideas related to the topic, to indicate that there was no single correct answer to the questions posed, to encourage a range of attributes, and to keep the discussion moving.

- The group then discussed the responses of the participants and, if relevant for the specific question, provided ratings or rankings for the issues identified. The group voted by a show of hands which items would be appropriate to maintain on the list. If all were in general or “reasonable agreement” (defined as at least a simple majority) about the item or characteristic, the group proceeded to the next item. Specific votes were recorded if there was not general agreement.

- The group discussed any issues that needed further clarification or a specific rationale provided for its decisions. If necessary, groups could then re-vote on those issues to maintain or delete the characteristic from the list.

Recorders for each group then listed the characteristics or indicators on a standard reporting template (see Appendix C) and captured, to the best of their ability, any rationale or salient points for the group’s decisions and recorded the vote, if it was not unanimous.

Compilation

Following the completion of each breakout session, the facilitators and recorders reviewed the notes and finalized the report for the group on that specific topic. If more than one group discussed the same question, members of the Advisory Committee then compiled the responses from each group and consolidated items.

Group Summary Reports

Following each of the breakout sessions, the Summit participants reconvened as a whole. One of the facilitators for each breakout group reported the results of his or her individual group’s discussion. The facilitator highlighted any areas where there was not agreement. The conference facilitator and a member of the advisory committee moderated the large group discussion after each summary report to determine if any items needed further clarification or discussion on any of the characteristics or items listed for each topic area.
Conference Documentation

An ad hoc report writing group was identified from among the members of the advisory committee to prepare this report and included at least one representative from each of the four sponsoring organizations (ASHA, CAA, AAA, and CAPCSD). This group, which included Dennis Burrows (CAA), Stephanie Davidson (ASHA), Lisa Hunter (AAA), and Neil DiSarno (CAPCSD), drafted the Summit report to ensure that the resulting documentation accurately and concisely represented the outcomes of the conference and provided it to the full advisory committee for final approval. Preliminary reports were provided during the AAA conference in early April 2006 in Minneapolis, Minnesota, by two of the members of the Committee who had represented AAA and during the CAPCSD conference in late April 2006 in Sandestin, Florida, by two of the members on the Committee who had represented CAPCSD. This final report is being disseminated to all Summit participants and to the four sponsoring organizations for use and distribution as they deem appropriate for their constituents.

Summit Presentations

As noted above, the advisory committee invited individual speakers and panelists to make brief presentations on each of the four major topic areas to provide an overview of the issue and to pose questions to the group to stimulate their thinking for the subsequent small group breakout sessions. In addition, advisory committee Chair, Dennis Burrows, made an opening presentation and provided background and historical information about the various activities, discussions, and conferences that have been held since 1987 regarding the development of audiology education and described the purposes of the Summit.

Speakers for the conference were as follows:

- **Audiology Clinical Education in Context**—Arlene Carney, PhD, University of Minnesota
- **Clinical Education in Other Professions**—Richard E. Talbott, PhD, University of South Alabama
- **Core Areas in Audiology Education**—panelists included
  - Colleen Noe, PhD, James H. Quillen VA Medical Center, Mountain Home, Tennessee, and East Tennessee State University, Johnson City, Tennessee
  - Marlene Bevan, PhD, Audicare Hearing Centers, Inc., Traverse City, Michigan
  - Susan Brannen, MA, Monroe 2 BOCES, Spencerport, New York
  - Paul Kileny, PhD, University of Michigan Medical School
  - Gay Ratcliff, MS, Central Florida Speech and Hearing Center, Lakeland, Florida
- **The Value and Challenges of Clinical Externships**—same panelists as indicated above
- **Selection of Clinical Sites**—Harvey Abrams, PhD, VA Medical Center, Bay Pines, Florida
- **Student Preparation Before Clinical Placements**—Sharon Lesner, PhD, University of Akron and Northeast Ohio AuD Consortium
- **Student Evaluation During Clinical Placements**—Sharon Sandridge, Cleveland Clinic Foundation

Each of these presentations is included in Appendix E.
Conference Topics and Questions

The participants discussed the following questions during the Summit, which had been developed by the advisory committee.

I. Core Areas of Clinical Practice

1. What are the core areas of clinical practice for graduates of a clinical doctoral program in Audiology?

II. Value and Challenges of Clinical Externships

1. What value can be gained from participating as a clinical site?
2. What are the challenges to participating as a clinical site and what are some solutions/strategies that could be used to minimize those challenges?
3. Under what circumstances, if any, should financial support (beyond loans and grants) be provided to students during externships?

III. Selection of Clinical Sites

1. What are the essential characteristics of a quality clinical site used for rotations and externships?
2. What are the essential characteristics of a quality preceptor?
3. What are the essential considerations for matching a student with a specific clinical site?

IV. Student Preparation for Clinical Placements

1. What are the essential characteristics of effective ways to sequence course work with clinical experiences?
2. What are the essential considerations for determining the sequence of clinical experiences/placements?
3. What are the essential characteristics of effective methods of measuring student readiness for clinical placements?
4. What are the essential characteristics of effective communication regarding student readiness among the academic programs, students, and clinical sites?

V. Student Evaluation During Clinical Placements

1. What are the essential characteristics of a tool(s) for evaluating student performance during rotations? Externship(s)?
2. What are the essential characteristics of an effective remediation program for students having difficulty during clinical rotations? Externships?
3. What are the essential characteristics of effective communication regarding student performance during the clinical placement among the university, the clinical site and the student during the rotations? Externship(s)?
DISCUSSION SUMMARIES

Following is a summary of the discussions regarding each of the questions considered during the Summit. Each section includes the essential characteristics or considerations that the groups identified related to the specific questions posed on which they had at least general agreement. Following those characteristics is an explanation of the salient points made during the discussion related to that particular topic.

When multiple breakout groups considered the same question, there were some instances in which there were variations among the groups in the level of agreement. In some of these cases, the full group was not able to reach resolution on these apparent inconsistencies. Any such variations are addressed in the Salient Discussion section.

I. Core Areas of Clinical Practice in Audiology

1. What are the core areas of clinical practice for graduates of a clinical doctoral program in Audiology?

In the first Audiology Education Summit, participants agreed that it was essential for programs to offer a curriculum that covered the breadth of audiology practice, but also agreed that not all aspects of the scope of practice needed to be covered to the same depth. For this Summit, the process was taken a step further; participants were asked to define the core skill areas of audiology clinical practice. In other words, participants were asked to define those areas of clinical practice in which students must achieve a depth of skill or proficiency upon graduation. Specifically, participants were asked to identify areas of audiology practice in which all new graduates would be expected to demonstrate independence and proficiency, regardless of the educational program attended or the initial job setting. Participants were asked to focus on specific skills, rather than knowledge of an area.

To facilitate the process, each of the seven breakout groups was provided with instructions on the process (the specific directions and definitions that were provided to the participants are included in Appendix E.5). Each group was also provided with a list of proposed core areas that was prepared in advance by the Advisory committee based on skills included in the AAA and ASHA scopes of practice for audiologists. It is important to note that even though all discussion groups were encouraged to comment on multiple skill areas, each group was provided a subset of areas on which to focus. For example, Group One’s primary assignment was core areas 1, 2, and 3 (Audiologist and Patient Communication Skills, Auditory Assessment, and Vestibular Assessment and Rehabilitation), while Group Four’s primary assignment was core areas 4, 5, and 6 (Professional Issues, Amplification and Sensory Aids, and Evidence-Based Practice), and so on. This format ensured that each skill area was considered by multiple discussion groups.

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1For the purpose of this conference core was defined as those critical areas of clinical practice that require a depth of skill or proficiency upon completion of the doctoral program, regardless of an individual program’s specific mission, in order to begin professional practice.

2For the purpose of this conference depth of skill was defined as the level of independence necessary for practitioners to enter the profession, while seeking expert advice when needed.

3For the purpose of this conference proficiency was defined as a skill level that is consistent or developed, requiring guidance or infrequent consultation.
Participants were first asked to divide the skill areas into two groups—those areas the group considered to be core and those considered to be non-core areas. For those skill areas that were determined to be non-core, participants were then asked to rate the non-core areas for importance on a 3-point scale (1 = the skill was closest to the core, 3 = the skill was farthest from the core).

Figure 1 below represents the Audiology Scope of Practice. The center core represents those skills that are critical or absolutely necessary to begin independent professional practice. The area outside the core represents areas of practice for which one must have knowledge, but not necessarily for which one has mastered the skill. Each of the six small circles distributed along the inner circle represents an area of program specialization.

Listed in Figure 2 are the core and non-core skill areas identified by the groups for new graduates of clinical doctoral programs in audiology. Skills listed under the “Core Areas” heading are those that each group included as core areas of clinical practice, and thus can be construed as collectively agreed upon skill sets needed by new graduates. Skills listed under the “Non-Core Areas” heading are those skill areas that were placed into the non-core area by one of more of the seven groups. The “closeness to core” rankings also are included. When there was significant disagreement between groups or among members of a group, a range of rankings (e.g., 2 to 3) is included. Those areas listed in the “non-core” column tended to be areas that one or more groups believed to be “breadth” rather than “depth” areas. In other words, groups believed that new graduates should not be expected to be independent or proficient in the area—rather, the new professional would be expected to have knowledge of the area and perhaps some experience, but he or she would need additional experience and mentoring in order to gain independence in the area.
<table>
<thead>
<tr>
<th>Core Areas</th>
<th>Non-Core Areas</th>
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<tr>
<td>**1. Audiologist and Patient Communication</td>
<td>**1. Audiologist and Patient Communication</td>
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<td>Skills</td>
<td>Skills</td>
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<td>• Case history/interview techniques</td>
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<td>• Counseling</td>
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<td>• Communication measurement scales</td>
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<td>• Personal and interpersonal dynamics</td>
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<td>• Cultural sensitivity and competence</td>
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<td>• Oral and written communication (added in</td>
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<td>large group discussion)</td>
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<td>**2. Auditory Assessment</td>
<td>**2. Auditory Assessment</td>
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<td>• Behavioral tests of auditory function</td>
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<td>• Physiologic measurement of auditory function</td>
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<td>**3. Vestibular Assessment and Management</td>
<td>**3. Vestibular Assessment and Management</td>
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<td>• Diagnostic techniques and procedures</td>
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<td>**4. Professional Issues</td>
<td>**4. Professional Issues</td>
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<td>• Inter-professional relationships and</td>
<td>• Management and treatment strategies (Rank of 1)</td>
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<td>responsibilities</td>
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<td>• Ethical and legal issues</td>
<td>• Quality improvement issues (Rank of 2)</td>
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<td>• Credentialing</td>
<td>• Reimbursement (Rank of 2)</td>
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<tr>
<td>**5. Amplification/Sensory Aids</td>
<td>• Practice management (Rank of 2)</td>
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<tr>
<td>• Physical and electroacoustic characteristics</td>
<td>• Healthcare marketing (Rank of 2-3)</td>
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<td>of amplifying devices</td>
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<td>• Selection, fitting, and evaluation of</td>
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<td>amplifying devices</td>
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<td>• Assistive devices</td>
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<td>• Candidacy evaluation for implantable</td>
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<td>**6. Evidence-Based Practice</td>
<td>**6. Evidence-Based Practice</td>
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<td>• Clinical decision process</td>
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<td>• Referral procedures and case management</td>
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<td>• Clinical diagnosis and evaluation</td>
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<td>• Treatment planning, implementation, and</td>
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<td>monitoring</td>
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<td>• Outcomes measurement</td>
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<td>• Critical reviewer of research (added in</td>
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<td>large group discussion)</td>
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<td>Conservation of Hearing</td>
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<td>• Public and consumer information</td>
<td>• Federal/state regulations (Rank of 1)</td>
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<td>• Hearing conservation models (Rank of 2)</td>
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<td>• Worker’s compensation issues (Rank of 3)</td>
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<td>• Forensic audiology (Rank of 3)</td>
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<td>**8. Audiologic Habilitation and Rehabilitation</td>
<td>**8. Audiologic Habilitation and Rehabilitation</td>
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<td>• Communication skill assessment and</td>
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<td>intervention</td>
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<td>• Family-centered evaluation and treatment</td>
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<td>• Educational management</td>
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<td>• Effective use of sensory aids/assistive</td>
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<td>devices</td>
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Salient Discussion

Most summit participants agreed that creating a “laundry list” of assessment and remediation techniques would not be a useful exercise, as particular tests and techniques change over time. Instead, discussion groups tended to focus their conversations on broader skill areas. Several groups emphasized the need for students to integrate well across categories—for instance, one group stated that the bottom line for diagnostics is that audiology graduates “be able to effectively use a case history and appropriately select, administer, and interpret results to ensure that the correct diagnostic and referral outcome is achieved;” another group indicated that evidenced-based practice should not be a separate category; rather, it should underpin everything that audiologists do.

Many participants acknowledged struggling with the concept of “core skill.” Participants reported having to remind themselves that the process was designed to define skills rather than knowledge areas. Becoming comfortable with defining depth of skill also was problematic. On the one hand, the graduate must have more than knowledge—he or she must have a skill that can routinely be used. On the other hand, participants also reported having to remind themselves that being proficient and competent does not necessarily mean that one is an expert.

Although group participants spent much of their time determining whether skill areas were “core” or “non-core,” participants engaged in lively discussions regarding the appropriate categorization of skill areas (e.g., Is evidence-based practice a separate area, or does it transcend all? Should hearing measurement scales be included as an assessment rather than a communication skill? Should tests of auditory and vestibular function be in the same category? Should family-centered approaches be listed under multiple categories?). Individuals in more than one discussion group struggled with the term dispensing under the Amplification/Sensory Aid category, because the term could refer to the business/marketing aspects of dispensing, the patient care aspects of dispensing, or both. Because many individuals believed that it was important to separate dispensing into two areas—selection, fitting, and evaluation of amplifying instruments and business aspects of dispensing—it is shown that way in Figure 2. Once separate, it became clear that participants universally agreed that selection, fitting, and evaluation of amplification devices is core, while many believed the business/marketing aspects of dispensing (although ranked “1”, or closest to the core) are non-core for the new audiology graduate.

Some groups also noted areas of audiology practice that were not specifically cataloged in the initial list of proposed core areas that was provided to each discussion group. These topics are listed below.

- Equipment Calibration
- Otoscopy
- Cerumen Management
- Tinnitus Assessment
- Tinnitus Management
- Prevention of Vestibular Disorders
- APD Assessment
- APD Management
- Intraoperative Monitoring
- Selection and Fitting of Hearing Protection Devices
- Vocational Management
- Ear mold Impressions

Because the recommended changes or additions were not presented to the full group for discussion, they are listed here for possible inclusion/integration at a later date.

Participants readily acknowledged that students cannot (and should not) be expected to be proficient in the entire scope of audiology practice upon graduation. Thus, even while there was disagreement between and within discussion groups as to what constitutes core skill areas for new audiology graduates, Summit participants agreed that defining a core set of skills was an important
exercise for the profession. Participants believed that obtaining general agreement on core skill areas would be beneficial to students, clinical audiology programs, and potential employers, and would be particularly valuable in establishing student outcomes for graduation.
II. Value and Challenges of Clinical Externships

1. What value can be gained from participating as a clinical site?

Summit participants were in general agreement that the following list of items represents the values of participating as a clinical site. Primary values are those that the majority of participants believed were immediate and evident to the clinical site as well. Additionally, the participants were able to identify values they believed were secondary to the clinical site. These secondary values were not as generally agreed upon and were thought to be not as evident and directly beneficial to the placement site. Not surprisingly, there was some disagreement as to what items should be categorized as primary or secondary. Inasmuch as this summary is designed to highlight the values, challenges, and solutions for clinical placements, those items that were listed as both primary and secondary are presented as “primary” for the purposes of this listing. Items that were not listed as primary but only as secondary are listed as such.

Primary Values

- A placement may allow for a pre-screening in the recruitment of potential employees.
- Preceptors and other staff learn from the student in terms of new information as well as in preparing for student questions. A student placement keeps the entire placement site “finely tuned.”
- A clinical site’s patients can benefit in terms of the new information and methods that the student introduces, as well as evidence-based practice principles and other emerging trends in audiology brought by a student.
- Participation as a clinical site advances the profession and the community by exposing students to “different” procedures and methods that develop additional skill sets.
- An opportunity to give back to the profession is provided.
- The impact as a mentor and the influence one can have on a future professional’s life is laudable.
- Clinical productivity could be enhanced.
- Affiliation with a university as a clinical training site could enhance the “business” of the site when seen by the public as the “teacher.”
- Privileges afforded a site by a university in exchange for accepting a student can be valuable. Status as an adjunct faculty member may provide access to the library and interlibrary loan and other university benefits (CEUs, athletics tickets, etc.).
- Accepting students provides an opportunity to preceptors for change and variety from the normal clinical routine.
- Accepting students helps one stay young and bridge generational gaps.

Secondary Values

- Preceptors may acquire a skill set for working with multicultural populations through observing student skills.
- A student placement may foster and stimulate research activity and ideas.
- Accepting students provides opportunities for interaction with university professionals and access to “experts.”
- Accepting students provides for networking opportunities among the audiology community.
- Preceptors can help shape the academic and clinical curriculum at the university.
Experience as a preceptor is a significant entry on a resume and can have a positive impact on career development. Patients are pleased to assist with the training of future audiologists.

**Salient Discussion**

The essence of the discussion began with asking the question, “How can we convince clinical sites to take students?” To this end, participants discussed at some length the motivations for taking students. Much of the discussion revolved around the direct benefits and the indirect benefits derived by providing clinical training to students. Additional staff productivity, although debatable, is an example of a direct benefit, as are any remuneration or privileges gained by the site from the university. However, it was readily acknowledged that sites should not perceive students as “cheap labor” and, as such, students should not be assigned activities as busy work, unless this was a normal part of the workload.

The remainder of the discussion addressed less direct benefits such as the knowledge and new techniques a student brings to the site. Keeping the clinical site up to date was thought to be a very positive aspect of taking a student. Additionally, an opportunity to “preview” a potential candidate for future employment was noted as a plus. The credibility of being the “teacher” and the experience as a preceptor were benefits enjoyed by both the site and the clinical preceptor. Lastly, the ability to give back to the profession and to develop a mentoring relationship may be seen as selfless, but most believed there was much to be gained by the preceptor in terms of professional development and by the site in terms of being perceived much like a teaching hospital.

2. **What are the challenges to participating as a clinical site and what are some solutions/strategies that could be used to minimize those challenges?**

Summit participants were in general agreement that the following list of items represented the challenges and some suggested solutions for participating clinical sites. There were many issues that may be a challenge to clinical sites taking externship students. However, it was evident that there were solutions or strategies that made these issues less challenging. There was no grading or rating of the challenges by the participants, so these are simply listed with the solutions/strategies to follow.

**Challenges**

- Some sites may have exclusive contracts with university programs such that externs from other university programs could not be accommodated.
- The necessity of establishing memoranda of understanding with multiple academic programs could be cumbersome and potentially costly.
- The funding of students or lack thereof is troublesome. Competition for student externs may evolve to placement strictly based on the availability of funding and not due to the desirability of practicum opportunities.
- There are both direct and indirect costs of taking student externs.
- Patient volumes and clinical diversity may be insufficient to take a student.
- Adequate staff may not be available to serve as preceptors.
- Sites may not always have the ability to bill for services provided by students.
- Somewhat related to billing, the issue of having temporary or provisional licensure is perceived as problematic.
- Some sites may have an assumption of liability for the services provided by a student.
A clear understanding of the university programs’ expectations for student learning and the evaluation of students is essential. Methods of remediating students or dealing with struggling students should be known. Communication between the program and the site and vice versa is necessary, which can be a time-consuming process.

There is a learning curve for a student regarding clinic logistics (not directly related to clinical skills), which can be problematic if the placement is short.

There could be a loss of productivity for preceptor staff during a student placement because of the time spent in training.

The selection of students could be difficult with universities at a distance or those with exclusive contracts. Moreover, a site may be ideal for a particular student but the site may not be willing to accommodate the student. There should be a willingness on the part of a site to take students of varying clinical skills.

There are timing issues related to student placement (e.g., should there be a known, standard timeline, including start dates and length of the externship experience?).

Some believed that the requirement for the ASHA CCC to be held by the preceptor could impede student placements.

A longer student commute may make a site less desirable.

Extra time is required for preceptors to plan experiences for students to acquire the knowledge and skills and to evaluate the outcomes while still meeting their own job obligations.

The responsibility for the externship lies with the academic program.

The Clinical Fellowship model is not applicable. Students need to evolve to independence, which will require more planning and evaluation.

**Solutions/Strategies**

- Discourage the development and use of exclusive contracts. Create a "global" or "universal" memorandum of understanding (MOU) accepted by multiple academic programs.
- Establish a "pass through" with the Centers for Medicare and Medicaid Services (CMS), whereby the site receives funding for helping to train students.
- Examine the student to patient ratio to determine if the patient load is adequate. Low diversity or low patient volume sites could offer themselves as a site for a portion of the externship.
- Examine the student to preceptor ratio to assess the adequacy of staff availability for preceptor duties.
- Academic programs should provide liability insurance for the student.
- A universal list of expectations and competencies would be helpful in solving the issue of communication between the university and a clinical site. In addition, there should be regular communication throughout the externship.
- Create a universal evaluation form that all clinical sites and all academic programs can use.
- Opportunities provided by university programs for training or courses in supervision could be helpful. These courses could be online or conducted at state conventions or other easily accessible venues.
- Make time to spend with students to provide feedback every day. Building this time into the schedule, if possible, would be helpful.
- The university could recognize and show appreciation for the preceptor by providing adjunct professor appointments. Other forms of appreciation could be useful in promoting the placement of students.
• Programs should provide more information about the status and needs of students and the specific expectations for student performance. A national form to be used by all programs to describe students for placement could be used.
• Programs need to convince administrators at sites about the value of taking students.
• Matching programs and the American Academy of Audiology "timeline project" are possible solutions to the timing issues.

Salient Discussion

Many of the proposed solutions to the challenges identified seem to lie with the academic programs. Consistency in placement, evaluation, and communications could solve many issues that are problematic with externship programs. Assuming the responsibility for insurance and the development of methodology to evaluate the adequacy of clinical placement sites once again appears to be the responsibility of the academic program. It was acknowledged that not all of the solutions require the academic program to act unilaterally but could be a cooperative project between academics and practitioners. Continuing education in serving as preceptor could be offered through universities or through venues such as a convention or online courses. There does appear to be some momentum for developing tools that can be used on a national scale. Several examples of these national tools were discussed.

3. Under what circumstances, if any, should financial support (beyond loans and grants) be provided to students during externships?

Breakout groups were asked to address the issue of financial support. Many forms of support were discussed but there was no clear consensus. General ideas and concepts were presented. It was acknowledged that the ideal model would be that stipends are provided to students.

Financial Support

Mechanisms for Providing Support

Given the lack of consensus on the most appropriate model, several mechanisms were suggested, as follows:

• If a student has to be sent off to a distant location, supplemental living expenses would be useful.
• Financial support could be tied to state licensure (i.e., in circumstances under which a student is legally able to bill for service).
• Although it is not direct payment, it was suggested that during the 4th year externship, tuition could be reduced.
• Externship sites can provide support either through a salary or stipend.
• Income from university tuition can be reallocated to assist students.
• Government sources may be available but it is unknown what these may be.
• Although recognized as a source, there was not general agreement that industry should underwrite student externships.
• Create a pool of resources funded through all of the stakeholders (universities, practitioners, industry) and then distributed to students.
• Create an unrestricted educational fund and have a governing body oversee it. Policies for awarding the funds would need to be developed.
• Create a competitive environment for student stipends.
**Salient Discussion**

There was a significant amount of disagreement over what form financial support should take. The ideal would be that all students receive support from an uninterested party without any expectations. However, it was noted that this was THE ideal and not likely. Inasmuch that some of the mechanisms for support that were listed were less attractive than others, it was necessary to list all possibilities. Some of these items were less appealing due to ethical issues, while others were less practical.

**Licensure**

As time permitted, some of the groups discussed the issue of whether a license is appropriate for a 4th year extern. This discussion was not part of the original Summit format and was an extemporaneous discussion. Although the discussion that ensued was lively, there was no agreement as to appropriateness of a license or, if a license was deemed necessary, the form that it would take. Moreover, it was acknowledged that licensure was an issue for state legislatures and beyond the purview of this Summit but that the issue does warrant further discussion.
III. Selection of Clinical Sites

Three questions were considered and discussed in six breakout groups for the overall topic of selection of clinical sites, related to the site itself, preceptors, and matching of students with specific sites.

Three breakout groups considered each question and were asked to identify characteristics that were critical or required as a quality component of a clinical doctoral program in audiology (categorized as “Essential Characteristics”), as well as characteristics that were desirable or “nice to have” (categorized as “Above Essential”) but not critical for a quality clinical doctoral program.

There is a great deal of overlap between the three questions that were addressed in the larger topic area, and some of the discussion within each group reflected this overlap, since it is difficult to discuss clinical sites without also discussing preceptors and matching. Thus, this summary reflects salient discussion within each intended subtopic, so that discussion from other groups relevant to each subtopic is captured in the overall summary. This was done so that important aspects brought up in other groups could be captured, and so that areas of agreement could be better clarified.

1. What are the essential characteristics of a quality clinical site used for rotations and externships?

Agreement among participants was reached on a number of important issues. Those areas in which general agreement was reached that certain aspects were “essential” to consider when selecting externship sites are clustered under the heading “Essential Characteristics.” Aspects that were identified by some participants as being important, but for which there was not general agreement about their importance, are placed under the heading “Above Essential.”

**Essential Characteristics**

**Equipment, Physical Facilities, and Ancillary Services**

- Contemporary and adequate equipment is in place and is appropriate to the mission of the site.
- Contemporary and adequate infrastructure equipment is in place and is appropriate to the mission of the site (office, computer, etc).
- Facilities should provide a safe, inclusive, and non-hostile working environment.
- Facilities should have enough working space to accommodate students.
- Facilities should meet all applicable state and federal legal and safety codes.
- Facilities should be located within a reasonable commuting distance when students are bound to courses, considering parking fees, tolls, safety, and parking.

**Diversity of Experiences and Caseload**

- The site offers sufficient diversity of caseload and services appropriate for the student’s educational needs and goals.
- The site allows students to participate in all aspects of audiology at that site, including billing, charting, meetings, planning, and so on.
- Experience at the site challenges/stretches the student.
- As necessary to broaden diversity of caseload, the site offers flexibility in supplemental placements.
- The site reflects the autonomous practice of the profession.
- Students are provided direct patient contact and comprehensive exposure to the entire clinical process.
- The site matches depth of student involvement with level of student experience, and encourages active participation rather than just observation.

Administrative Commitment

- There is an administrative commitment to teaching and evaluating students, including access to administration and support from administration.
- The mission of the site includes active support of student education.
- The site is willing to sign affiliation agreements, is reasonably flexible in taking students at differing times and is willing to provide formative student assessments.
- The clinic environment is stable with regard to administrative support, offering disclosure of significant adverse administrative issues.

Staff

- The site employs an adequate number of appropriately credentialed individuals who match student needs and who are recognized as strong clinicians and preceptors.
- The site has a lead preceptor who coordinates experiences for the student; and is someone the student can go to for guidance.
- Staff at the site model professionalism.

Policies and Procedures, Evaluation Process

- The site provides a formal student orientation process.
- The site is willing to provide regular feedback to the university to help shape clinical curriculum with a formalized positive working relationship between university and site.
- The site is willing to solicit and accept feedback from the student and program.
- The site employs a formalized system of assessing student performance.
- The site is willing to participate in a formalized system for evaluating the preceptor and the site.
- The site is willing to collaborate and interact on matters regarding the art and practice of precepting.
- The clinical site has clear written policies and procedures in place (e.g., clinical procedures, infection control, and other safety procedures).

Evidence-Based Practice

- The site uses evidence-based practice, including written protocols.
- The site is willing to collaborate with the university as appropriate on evaluation protocols.
Salient Discussion

The above characteristics were generally agreed upon by participants as being necessary components of externship sites. However, there was recognition that some sites may have differing levels with regard to current equipment, staffing levels, and so on due to the nature of their practices. For example, currency of equipment was identified as an essential characteristic, but it was also recognized that there is significant educational value for students in using older, but still functional basic equipment, especially if this is what a clinician may need to use in more remote locations (i.e., Peace Corps, rural communities, etc.). Thus, there needs to be some flexibility in applying these characteristics as long as the overarching outcomes in breadth and depth of training are achieved.

Above Essential Characteristics

Continuing Education

- Exposure to other professional experiences at the clinic site is available (e.g., interdisciplinary experiences, team meetings, in-house continuing education, grand rounds, etc.).
- The site is willing to facilitate continuing education outside the clinic—providing reasonable release time to attend conferences and meetings.

Interdisciplinary Opportunities

- The site provides opportunities for interdisciplinary exchanges.

Research Opportunities

- There is some opportunity for exposure to on-site research and opportunities to participate in research.

Equipment and Infrastructure

- E-mail and Internet access are available on site.
- Other staff (non-audiology) are supportive and willing to work with students.

2. What are the essential characteristics of a quality preceptor?

Essential Characteristics

Knowledge

- The preceptor has a theoretical understanding and currency in the field of audiology.
- The preceptor’s knowledge and skills are contemporary and current for core areas relevant to site.
- The preceptor has a working knowledge of the supervisory process.
Experience

- The preceptor has a minimum of 3 years of experience as an audiologist, with 5 years of experience preferred.
- The preceptor has been in the professional setting long enough to forge relationships.

Credentials

- The preceptor has a graduate degree in audiology, holds current state license(s) or the top state credential unless the individual is exempt (state employee) or the state has an exclusion policy or the equivalent.

Skills

Participants agreed on a large number of skills that are desirable in a quality preceptor, while recognizing that it is difficult for any person to be the “perfect” preceptor. The following skills were felt to be essential to creating a positive relationship between the preceptor and student. The preceptor should

- create an environment for positive and supportive learning and interaction
- have good teaching capabilities and a willingness to be an instructor
- have good oral and written communication skills, with triangulation of communication between the preceptor, student, and university
- be flexible in teaching style and methods of working with students
- be capable of evaluating skills rather than personality
- adhere to a high standard of care while modeling best practices; actively using and modeling evidence-based practice
- set appropriate goals and expectations
- give ongoing feedback to student and the university and be willing to partner with the university in evaluating and training students
- strive for teaching excellence; inquire, challenge, and provide constructive feedback
- have good time management skills and ability to multitask
- employ active listening

Personal Characteristics

Participants identified a large number of personal characteristics they considered to be essential in an “ideal” preceptor, while recognizing that we are human and will have different strengths to offer. The preceptor should

- demonstrate generational, cultural, and diversity awareness
- possess personality traits such as sensitivity, patience, maturity, honesty, respectfulness, openness, leadership, and professionalism
- maintain appropriate discretion and confidentiality
- be appropriately protective of students
- be willing to be a preceptor for the right reasons, including motivation and desire to be a preceptor
be an ethical model for professional issues, recognizing and following scope of practice limitations
exhibit professional humility
be a lifelong learner and appreciate opportunities to teach as well as to learn

Practical and Preparation Issues

There are a number of practical and logistical issues that are clearly essential to quality sites, yet often are difficult to achieve due to institutional or other barriers. General agreement was reached that the following practical considerations are necessary.

The preceptor should

- be available and have sufficient time to spend with the student face-to-face
- be adequately prepared for students
- be adequately prepared by the university
- make students aware of resources at the site and facilitate involvement
- be in regular contact with educational program

Salient Discussion

General agreement was reached that preceptors need to hold appropriate state licensure but not necessarily a national credential. Additionally, while specific education, training, and experience in supervision of students was considered highly desirable, the general consensus was that requiring this would limit too many otherwise excellent preceptors from participating in training students.

An important consideration is that preceptors should prepare for students by orchestrating and preparing the facility and staff for the student’s arrival (planning for orientation, space, etc.).

Above Essential Characteristics

Participants agreed that the following are desirable but not essential characteristics for a quality externship site.

Preceptors should

- have specific course work and training in being a preceptor
- hold national certification in audiology, such as the Certificate of Clinical Competence or American Board of Audiology Certification
- hold a doctoral degree in audiology (i.e., AuD or PhD)
- be certified as a preceptor, recognizing that such certification is not currently available
- have had a minimum of 6 months experience at the site
- be recognized experts in a particular area
- have had clinical education experience
- have had formal teaching experience
- have cutting-edge experience in an area in the field or professional issues
3. What are the essential considerations for matching a student with a specific clinical site?

Summit participants agreed that the following characteristics are essential to appropriately match a student’s needs with available externship sites.

**Essential Characteristics**

**Communication (Student, University, Site)**

There should be

- an established communication plan between the site and academic program (e.g., mechanism for creating match; interviews: face-to-face or by phone)
- a partnership among the stakeholders
- a plan to manage expectations among students, sites, and the university
- a contractual and philosophical match between the university and the site

**Student Characteristics**

The following areas were generally agreed to be essential considerations in the matching process:

- the student's history of previous internships and evaluations of those experiences
- the student's prior experiences and needs
- personality variables of both student and preceptor
- the student's clinical skills experience
- academic course work (prior to and/or at time of placement)
- a match between student clinical experience needs and what the site can provide
- diversity of clinical experiences across practice settings throughout entire education program

**Site Characteristics**

- The site provides evidence-based practice, ethical practice, and quality service.
- Site qualifications meet the needs of the student in terms of caseload diversity (disorder type, age, cultural aspects).
- Resources such as equipment and staffing are well matched to the student’s needs.
- Breadth, depth, and complexity of experiences at the site are matched with student needs and level.

**Salient Discussion**

While there are practical matters such as student preferences, finances, and geographic location that frequently drive the matching process, it was generally agreed that these considerations should not take precedence over the more important considerations for breadth, depth, and quality of the educational experience.
Above Essential Characteristics

- Finances of the student
- Geographic location of sites
- Student preferences or desires for setting
- Personality compatibility
- Stability of site (staff etc.)
- Cultural compatibility between student and preceptor
- Feedback/evaluation from previous students
IV. Student Preparation Before Clinical Placement

The breakout groups considered four questions related to the appropriate preparation of students before they are placed at clinical sites. They were asked to identify essential characteristics related to effective ways to sequence course work, determine the sequence of clinical experiences, ways of measuring a student’s readiness for a placement, and how to communicate student readiness among the program, student, and placement site. Not all of the four questions were considered by all the groups.

1. What are the essential characteristics of effective ways to sequence course work with clinical experiences?

Summit participants agreed that the following characteristics are “Essential” for sequencing the course work with the clinical experience. General agreement was achieved for these essential characteristics.

Essential Characteristics

Courses

- A program should attempt to keep a similar sequence of courses so that supervisors at clinical sites will know what courses students have already had.
- Programs should provide preceptors with the content of the courses students have taken (academic curriculum) so that they are aware of what clinical experiences are relevant and appropriate for the student.
- Preceptors should be able to make recommendations regarding a desirable course sequence before students come to their clinical sites.
- Some "science" courses can be taught during or after clinical experiences (e.g., psychoacoustics).
- Clinical courses should precede or be taken concurrently with clinical experiences.
- Some science courses must precede clinical experiences (e.g., hearing science, anatomy and physiology).
- Course work must match/precede external placement (e.g., pediatric course before pediatric placement; amplification course prior to hearing aid fitting).
- In-house placements can be more flexible regarding the sequencing/knowledge than external sites due to the focus of in-house versus external sites.
- Course work and clinical experience both should be graduated (i.e., basic before advanced).

Laboratories (skills development)

- Labs and hands-on experiences should be provided before clinic to help prepare the student for clinical work.
Salient Discussion

There was considerable discussion within the four breakout groups that the exact order of courses was not as important as the final outcome—a connection of the didactic with the practical. The other major point of discussion involved the teaching of basic science courses. While most were in agreement that this should precede the development of the clinical skills, it was clear that some of the basic course work could be performed after or during clinical placements, as appropriate.

2. What are the essential considerations for determining the sequence of clinical experiences/placements?

Summit participants in the four breakout groups considering this question had unanimous agreement that the following characteristics are “Essential” for determining the sequence of clinical experiences/placements for AuD students throughout their degree program.

Essential Characteristics

Placements

- Previous external placements of the student (e.g., successes, diversity) are used to determine further placements.
- Cumulative practical experience is sufficiently diverse to meet the needs of the student.
- For early clinical experiences, the preceptors must be employed as university faculty/staff.
- Students should have "simulation" experiences before advancing to patient contact. This could take the form of "clinic labs;" use of "volunteers" for tests; use of observation-only early in the program and then moving into assisting with patient care; having a course during the first semester such as "clinical case conference" or "orientation to clinic" that brings students up to speed on cases, terminology, and outcomes, so they are prepared to begin assisting in patient care later in the semester.
- Sequencing should build from basic to more advanced levels, using critical thinking, independence, and teamwork. This should be a stepped process, where students must demonstrate competencies before moving on.
- Programs should determine the sequence of clinical rotations.

Preparation

- Assessment of the student's readiness must occur, using various methods to assess one's clinical skills.
- Assessment of level of proficiency should occur before more advanced placement.
- The type of in-house experiences determines readiness for external placements.
- Assessment should include careful assessment of student competencies by many preceptors; self-assessment; ongoing assessment of student competencies as they move from placement to placement, with remediation plans as needed; and periodic practical assessments to achieve competencies.

Summit participants in the four breakout groups considering this question had general agreement that the following characteristics are “Above Essential” for determining the sequence of clinical experiences/placements for AuD students throughout their degree program.
Above Essential Characteristics

Placements

- All appropriate course work should be completed prior to a placement.
- Programs should consider the availability of sites to take students at varying skill levels and with varying needs (e.g., IOM)
- Student interest should be considered in sequencing clinical rotations.

Salient Discussion

In the discussion, other factors that will play a part in determining placements should be personalities of students and clinical preceptors. Additionally, off-site placements should be used to fill in gaps in training not available at the university as well as expanding on clinical experiences at the university program clinic. While indicated above that the placements should be progressive in nature, the breakout groups were of the opinion that initial placements should be with adults, with modest time pressure for diagnostic testing and report writing, which may include screenings for adults and older children. This could then be followed by more advanced diagnostics on adults and children with rehabilitation work on adults, etc.

3. What are the essential characteristics of effective methods of measuring student readiness for clinical placements?

Summit participants reached general agreement that the following areas, though certainly not an exhaustive list, are Essential for the development of methods to measure student readiness for clinical placements.

Essential Characteristics

Who assesses?

- There should be a team approach with more than one person (multiple raters).
- Self-assessment by the student should be incorporated.
- Student strengths and weaknesses as judged by the on-campus supervisor should be shared with preceptors.
- Faculty, staff, and committees should confer regularly about the students’ progress and the program.
- A student’s improvement or remediation plan, if applicable, should be shared with the site if the need for improvement is in an area that directly impacts the student’s work at that site.

What is assessed?

The following areas should be assessed:

- professionalism
- academic and clinical performance
- course work prior to internal placement in area
- course work prior to external placement in area
- course/lab concurrent with clinical placement
- knowledge and skill acquisition demonstrated for core academic courses prior to placement
- knowledge and skill acquisition demonstrated in a basic test battery for children
• knowledge and skill acquisition demonstrated in a basic test battery for adults
• knowledge and skill acquisition demonstrated in a basic physiologic battery
• counseling skills
• knowledge of anatomy and physiology of auditory and vestibular systems
• knowledge and skills related to fitting basic hearing aids

How assessed?

• Practical exam prior to first placement
• PRAXIS exam prior to external placement

Salient Discussion

The discussion centered primarily on other tools or means for assessing readiness. Some suggested using a comprehensive examination approach at the end of each year to determine readiness to proceed to the next level of clinical experience. Others believed that initial placements should begin in-house or on-campus with little or no true readiness assessment and that the initial placements could serve as a readiness evaluation themselves.

4. What are the essential characteristics of effective communication regarding student readiness among the academic programs, students, and clinical sites?

Summit participants reached general agreement that the following characteristics are “Essential” for effective communication with the students, clinical sites, and the program regarding the student’s readiness to proceed with clinical placements.

Essential Characteristics

Documentation

The program should provide to sites

• a tool that is an organized, written record, such as a Clinical Proficiency Handbook (including information regarding HIPAA, background checks, etc.), for the student and preceptor, describing the student's skill levels coordinated with academic course work
• a record/history of the student's basic job and professional skills and work ethic
• the curriculum, course descriptions, and sequence (to both sites and preceptors) so that the site/clinic director is familiar with the curriculum, instructors, and so on
• a standardized mode/form/metric to inform the site of the student's readiness
• information about course content (e.g., course syllabi, transcripts)
• a checklist of expected goals, clinical skills, and competencies to be achieved
• any specific recommendations and background checks on students
• student grades in previous courses
• any input from students about goals and expectations at the clinical placement
• applicable information about how the student approaches problems and conflict
• any concerns about the student's true readiness in meeting objective criteria
Other

- Sites should communicate to the academic program and student any specific do's and don'ts (e.g., define desired attributes related to professional appearance and conduct, schedules, punctuality, feedback from patients, etc.).
- Programs and site should have either face-to-face or telephone interviews to determine appropriate placements.

Summit participants in the two groups considering this question had general agreement that the following characteristics are “Above Essential” for effective communication to the students, clinical sites, and the program in general as to the student’s readiness status for proceeding with clinical placements.

Above Essential Characteristics

Other Considerations

Programs and sites should consider discussing and/or sharing other issues such as
- personality compatibility with the student and preceptor
- student résumés, research, projects, and so on
- the sites’ expectations and what they want students to know (e.g., billing)
- a handwritten statement of student goals and hopes (i.e., have students participate in setting goals, and then share those with the site/preceptor)
- information about the specific audiometric procedures that have been taught to students
- student portfolios with student assessments
- holding meetings between the program and site/preceptor the semester before the experience begins at the site

Salient Discussion

The group believed that the characteristics listed above should be considered as desirable, not truly “Above Essential.” Much discussion ensued around the issues of the students understanding their roles in the clinical placement relationship and understanding the role of the preceptor. In the development of the documentation it is important that the clinical site has input as to what information is provided as well as what they specifically need (e.g., it is possible that there may be information the site does not believe is necessary and there could be situations in which the sites may not actually know what they need or what would be helpful regarding the students). The group believed that although sufficient information about a student should be communicated to the site, it needs to be done in a manner that does not bias the site regarding the student. The same is true about the information provided to the student about a site—that information should not bias the student.
V. Student Evaluation During Clinical Placement

The breakout groups considered three questions related to the evaluation of students during their clinical placement experiences and were asked to identify essential characteristics of student evaluation during clinical placement.

1. What are the essential characteristics of a tool(s) for evaluating student performance during rotations or during externship(s)?

Summit participants agreed that the following characteristics are “Essential” for an appropriate tool for evaluating student performance during rotations and externships:

Development

The tool

- should be jointly developed by both the university and site preceptors
- must have validity, reliability, and internal and external consistency
- should be designed such that there are separate sections for different populations (e.g., difficult-to-test, pediatrics, adults)
- should evaluate the student based on a specific set of expectations consistent with the level of the student
- should be a manageable length and easy to use
- may use a Likert scale for assessing clinical skills
- must be appropriate and specific to the identified goals and expectations of the university as well as the site
- should have descriptors in addition to numbers
- should be an evolving instrument

Content

The tool

- should have specific content areas for evaluation (e.g., familiarity with the audiometer; technical skills)
- should be designed to include professional core competencies in addition to audiologic competencies.
- must include behaviors to be evaluated that are measurable and observable
- should evaluate accomplishments over time
- should have an open section for comments for the student as well as the preceptor
- should provide a rating scale that would allow the preceptor to rate the level of independence of the student, especially at the 4th year
- should include a section where the student can respond to the evaluation given by the preceptor (agree or disagree) and an opportunity to provide supporting documentation if the student disagrees
- should evaluate both skills and knowledge
- should include a professionalism component (e.g., dress code, lifelong learning, critical thinking, written and oral communication) that can be assessed on a satisfactory/unsatisfactory level
- should evaluate the student’s level of independence
Administration

- The tool should allow an opportunity for students to include self-assessment and allow them to set their own goals in conjunction with the preceptor's input. This could allow for self-assessment and allow the student to set goals. This would allow the student to take ownership of the experience.
- The tool should allow for students and preceptors to sign the evaluation during the formal assessments to document communication.
- The tool should allow an opportunity for the student to review the evaluation in a timely fashion.
- There should be an established and announced administration schedule for use of the tool.
- The student should know when he or she will be assessed throughout the semester.

Salient Discussion

All group participants agreed that using a tool that can evaluate student performance, both from the preceptor's and the student's point of view is essential. All items identified in the development, content, and administration sections above had either complete agreement among all participants or were agreed to by a majority of the participants.

2. What are the essential characteristics of an effective remediation program for students having difficulty during clinical rotations/externships?

Development

- Remediation plans need to be well documented and need to ensure that there is no risk for patients. Family Educational Rights and Privacy Act (FERPA) guidelines need to be considered.
- The "contract" should be developed between the student, the site, and the university.
- The plan should consider cultural and linguistic differences of the student.
- The "triggers" that would warrant remediation should be specifically identified and defined.
- Remediation plans should follow confidentiality guidelines.

Content

- There must be a baseline established in order to determine if there is a mismatch between level of expectation (from the clinical site) and level of preparation (by the academic program).
- Remediation plans need to be a positive tool for improvement, not punitive.
- Tie remediation to specific "competencies" so that it is not personal; focus on things such as work ethic and facility protocols/rules.
- The remediation plan should have a set time limit with an action plan focused on behavior, and consequences if remediation is not achieved.
- A written "contract or agreement" should identify the specific problem behavior(s), and the endpoint of remediation should be identified in some way, such as the expected behaviors or outcomes. The duration of the remediation needs to be specified but will be dependent on the underlying cause of the problem (e.g., knowledge, skill, etc.).
- The plan should provide the student with immediate and constructive feedback and should include regular feedback from the preceptor to the academic program.
The plan should contain a developed written action plan with the student to identify the specific problems, what is specifically expected, when change is expected, and when referral for other support services may be indicated.

**Administration**

- Administration of the plan should include regular communication with the academic program to facilitate remediation.
- Accurate and frequent documentation of situations or occurrences that indicate the need for remediation should be kept.
- Administration of a remediation plan needs to be a formal process that includes documented frequent and regular feedback provided to the student and the academic program.
- Students should be aware of the remediation process during academic program orientation.
- Remediation plans should be consistently applied across all students.
- Effective remediation should be shared between the site and the university, based on a shared plan of responsibility and remediation action.

**Salient Discussion**

Group participants agreed that there are several early considerations that may help prevent the necessity of remediation. Those considerations identified included a careful admissions process, development of technical standards, and evaluation of readiness prior to sending a student to a clinical placement. There should be clear expectations for the student at the orientation for the site and early communication between the site and the university. Participants agreed that the academic department should share information on technical standards with the site. If a problem develops, it is important to determine the underlying cause of the problem (e.g., knowledge base, application of skills, personal issues, personality issues, pragmatics, or the site itself). Responsibility for the remediation plan must be shared between the university, the site, and the student, with the university contributing resources as needed.

3. **What are the essential characteristics of effective communication regarding student performance during the clinical placement among the university, the clinical site, and the student during the rotations or externship(s)?**

Summit participants agreed that the following characteristics are “Essential” for effective communication between the university program and the clinical site and the student during clinical rotations and externships.

Although the headings designate the initiator of the communication process, in all instances the communication needs to include the site/preceptor, the university program, and the student.

**Communication With the Site Preceptor**

- University programs and clinical sites should establish a preferred communication type and frequency.
- There needs to be an established understanding of how performance will be evaluated.
- Programs need to communicate what they know and expect of a student.
- Preceptors and sites need to communicate what they expect from a student.
- The program should have clearly stated policies known to the externship site regarding student performance.
• Sites should be made aware of the procedures university programs suggest if a student does not succeed in a placement. Sites should be made aware of what the consequences are.

Communication With the University

• the preceptor should know who to contact at the university in case a problem develops.
• There needs to be honesty and openness among the program, the site, and the student.
• Communication needs to be labeled as formal or informal.
• Feedback and communication needs to be purposeful.
• All parties need to know the goal of communication and have a clear idea about why the encounter is taking place.

Communication With the Student

• Documentation of student performance should be done frequently. The majority of participants suggested daily feedback to the student.
• Students should be made aware of the procedures that will be implemented if the student does not succeed in a placement, and they should be made aware of the consequences.
• Students should be provided with a list of goals and competencies agreed to by the program and site that would be used for student evaluation.
• Students should be provided daily feedback and formal, formative mid-term and summative end-term assessments.
• Early, frequent, and scheduled communication needs to be provided to the student and the university program.
• Sites should be encouraged to use appropriate communication strategies (e.g., reflection) with students.
• The feedback to the student needs to be clear and direct.
• The student needs to be provided with behavior-specific recommendations (e.g., feedback) in writing of strengths and weakness from preceptor to student.
• Communication needs to occur using multimodal communication methods such as e-mail, phone, and site visits (depending on geographic locations and resources).

Salient Discussion

Participants agreed that frequent and formal communication among sites, students, and university programs is essential to a successful clinical placement. Participants were either in full or general agreement with all of the characteristics noted above.
Open Mic Discussion

On the afternoon of the second day of the Summit, the advisory committee provided the opportunity during an “open mic” session for participants to raise issues or questions related to the conference topics that they believed had not reached general agreement or resolution during the breakout or general sessions or that required further discussion. The facilitator provided the “ground rules” at the beginning of the session, which reflected that this was not an informal “hearing” nor a business meeting; therefore, there would be no motions or debates related to the question or comment, but rather an opportunity for participants to identify issues that would require further discussion in the future. He also indicated that all remarks, observations, and expressions of concern should be brief to allow sufficient time for participation by multiple attendees. Finally, he indicated that the comments and questions would be recorded in writing, for two primary purposes: (1) to assist the advisory committee in evaluating this summit and (2) to suggest issues for the agenda of any meeting(s) in the future.

The compilation of the notes taken by multiple recorders during this session is shown in Appendix F. Questions are grouped according to similar topic areas, where applicable. The names of the specific individuals posing the question or comment have been removed. At the conclusion of the session, it was noted that for questions related to specific topic areas that were within the purview of a particular group, organization, committee, and so on, those questions would be forwarded as appropriate for response.

Included at the end of this appendix are any responses that were available at the time of the writing of this report, provided by representatives of the relevant entity responsible for the related topic area (Appendixes F-1, F-2, and F-3).

Dissemination of Report

The advisory committee agreed that this final report would be distributed to each of the Summit participants, as well to each of the three organizations that sponsored the conference (ASHA, CAA, CAPCSD). These organizations will then have the discretion to disseminate or use the document as they deem appropriate.

Next Steps

The Summit advisory committee encourages individuals and organizations interested in the education of clinical doctoral students in audiology to incorporate opportunities for in-depth discussion of these topics in future conferences and meetings.
APPENDIXES
APPENDIX A: Meeting Agenda

The advisory committee planned the following agenda that was followed during the Summit.

ASHA Professional Development is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech–language pathology and audiology. This program is offered for 1.4 ASHA CEU’s (advanced level; related area). ASHA CE Provider approval does not imply endorsement of course content, specific products, or clinical procedures.

The American Speech–Language–Hearing Association is approved by the American Academy of Audiology to offer Academy CEUs for this activity. The program is worth a maximum of 1.3 CEUs. Academy approval of this continuing education activity does not imply endorsement of course content, specific products, or clinical procedures.

Audiology Education Summit II: Strengthening Partnerships in Clinical Education

February 3-5, 2006
Wyndham Phoenix
Phoenix, Arizona

DESCRIPTION

Audiology Education Summit II, a collaborative effort among professional organizations, preceptors, and educators, is designed to build on Audiology Education Summit I (January 2005) and other conferences related to audiology education. At the conclusion of Summit I, participants indicated a need to focus specifically on clinical education. The design of Summit II reflects the reality that clinical education is a critical component of the clinical doctoral curriculum, one that rests on a strong partnership between educators and preceptors.

The purpose of the Audiology Education Summit II is three-fold: 1) to identify and address current and emerging issues in clinical education in clinical doctoral programs; 2) to propose a set of quality indicators of clinical education that contribute to developing skilled professionals that can be used by clinic placement sites and academic programs; 3) to share resources and tools. Participants will include audiologists working in clinical facilities, educators, and other stakeholders. The intent is to
address critical issues including such “hot topics” as core areas of clinical practice, preparation and evaluation of students, qualifications of preceptors, student stipends, support for preceptors, and credentialing. The outcome of the conference will be a report of the issues discussed and conclusions reached, to serve as a guide for practitioners and faculty educating audiologists.
## AGENDA

**Friday, February 3, 2006**

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Topic</th>
<th>Presenter</th>
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</thead>
</table>
| 7:30-8:30     | Ballroom Foyer               | REGISTRATION
CONTINENTAL BREAKFAST & NETWORKING                                 |                                                                          |
| 8:30-8:35     | South Ballroom               | Welcome and Introductions                                            | Dennis Burrows                                                            |
| 8:35-9:00     | South Ballroom               | Invited Presentation: Audiology Clinical Education in Context        | Arlene Carney                                                            |
| 9:00-9:30     | South Ballroom               | Comments from the Facilitator (Meeting Logistics, Definitions, Breakout Group Process, Ground Rules) | Paul Gaston                                                              |
| 9:30-9:50     | South Ballroom               | Invited Presentation: Clinical Education in Other Professions        | Rick Talbott                                                             |
| 9:50-10:40    | South Ballroom               | *Topic #1 Presentation: Core Areas in Audiology Education*            | Panel: Colleen Noe, Marlene Bevan, Susan Brannen, Paul Kileny, Gay Ratcliff |
| 10:40-11:00   | Ballroom Foyer               | BREAK                                                                 |                                                                          |
| 11:00-12:00   | Various: South Ballroom (2); Salons 3, 4, 5, 6 | Breakout Discussions (see Break-Out Group list for room assignments) | All                                                                      |
| 12:00-1:15    | North Ballroom               | LUNCH PROVIDED                                                        | All                                                                      |
| 12:00-1:15    | South Ballroom               | Group Report Preparation                                              | Facilitators/Recorders                                                   |
| 1:15–2:00     | South Ballroom               | Group Summary Reports & Participant Reaction (*TOPIC #1*)            | Paul Gaston                                                              |
| 2:00–2:45     | South Ballroom               | *Topic #2 Presentation: The Value and Challenges of Clinical Externships* | Panel: Colleen Noe, Marlene Bevan, Susan Brannen, Paul Kileny, Gay Ratcliff |
| 2:45-3:00     | Ballroom Foyer               | BREAK                                                                 |                                                                          |
| 3:00-4:00     | Various: South Ballroom (2); Salons 3, 4, 5, 6 | Breakout Discussions (see Break-Out Group list for room assignments) | All                                                                      |
| 4:00-6:00     | North Ballroom               | Clinical Education Exchange: Resources & Models (in conjunction with Reception) | Paul Gaston/All                                                          |
| 6:00-7:00     | Havasupai                    | Group Report Preparation                                              | Facilitators/Recorders                                                   |
## Saturday, February 4, 2006

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>7:30-8:15</td>
<td>Ballroom Foyer</td>
<td>CONTINENTAL BREAKFAST &amp; NETWORKING</td>
<td>All</td>
</tr>
<tr>
<td>8:15-8:20</td>
<td>South Ballroom</td>
<td>Welcome Back</td>
<td>Dennis Burrows</td>
</tr>
<tr>
<td>8:20-9:20</td>
<td>South Ballroom</td>
<td>Group Summary Reports &amp; Participant Reaction (TOPIC #2)</td>
<td>Paul Gaston</td>
</tr>
<tr>
<td>9:20-9:40</td>
<td>South Ballroom</td>
<td>Topic #3 Presentation: Selection of Clinical Sites</td>
<td>Harvey Abrams</td>
</tr>
<tr>
<td>9:40-10:00</td>
<td>Ballroom Foyer</td>
<td>BREAK</td>
<td></td>
</tr>
<tr>
<td>10:00-11:00</td>
<td>Various: Salons 1-8</td>
<td>Breakout Discussions (see Break-Out Group list for room assignments)</td>
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<tr>
<td>11:00-1:00</td>
<td>South Ballroom</td>
<td>LUNCH ON YOUR OWN/Informal Networking</td>
<td>All</td>
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<tr>
<td>11:00-12:00</td>
<td>South Ballroom</td>
<td>Group Report Preparation</td>
<td>Facilitators/Recorders</td>
</tr>
<tr>
<td>1:00-2:00</td>
<td>South Ballroom</td>
<td>Group Summary Reports &amp; Participant Reaction (TOPIC #3)</td>
<td>Paul Gaston</td>
</tr>
<tr>
<td>2:00-2:20</td>
<td>South Ballroom</td>
<td>Topic #4 Presentation: Student Preparation Before Clinical Placements</td>
<td>Sharon Lesner</td>
</tr>
<tr>
<td>2:20-2:35</td>
<td>Ballroom Foyer</td>
<td>BREAK</td>
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<tr>
<td>2:35-3:35</td>
<td>Various: Salons 1-8</td>
<td>Breakout Discussions (see Break-Out Group list for room assignments)</td>
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<td>3:35-4:30</td>
<td>South Ballroom</td>
<td>Open Mic (Unresolved/Unaddressed Issues)</td>
<td>All</td>
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<td>3:35-4:30</td>
<td>Salon 1</td>
<td>Group Report Preparation</td>
<td>Facilitators/Recorders</td>
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<tr>
<td>4:30-5:30</td>
<td>South Ballroom</td>
<td>Group Summary Reports &amp; Participant Reaction (TOPIC #4)</td>
<td>Paul Gaston</td>
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## Sunday, February 5, 2006

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<tr>
<th>Time</th>
<th>Location</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30–8:15</td>
<td>Ballroom Foyer</td>
<td>FULL BREAKFAST &amp; NETWORKING</td>
<td>Dennis Burrows</td>
</tr>
<tr>
<td>8:15–8:30</td>
<td>South Ballroom</td>
<td>Welcome Back/Objectives for the Morning</td>
<td>Dennis Burrows &amp; Paul Gaston</td>
</tr>
<tr>
<td>8:30–9:00</td>
<td>South Ballroom</td>
<td>Topic #5 Presentation: Student Evaluation During Clinical Placements</td>
<td>Sharon Sandridge</td>
</tr>
<tr>
<td>9:00-10:00</td>
<td>Various: Salons 1-8</td>
<td>Breakout Discussions (see Break-Out Group list for room assignments)</td>
<td>All</td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Ballroom Foyer</td>
<td>BREAK (and Hotel Checkout)</td>
<td></td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>South Ballroom</td>
<td>Group Report Preparation</td>
<td>Facilitators/Recorders</td>
</tr>
<tr>
<td>10:30-11:15</td>
<td>South Ballroom</td>
<td>Group Summary Reports &amp; Participant Reaction (TOPIC #5)</td>
<td>Paul Gaston</td>
</tr>
<tr>
<td>11:15-11:40</td>
<td>South Ballroom</td>
<td>Summit Summary &amp; Wrap-Up: Resolved and Unresolved Issues, Future Topics</td>
<td>Paul Gaston</td>
</tr>
<tr>
<td>11:40-11:50</td>
<td>South Ballroom</td>
<td>Summit Evaluation</td>
<td>Paul Gaston</td>
</tr>
<tr>
<td>11:50–12:00</td>
<td>South Ballroom</td>
<td>Closing Remarks</td>
<td>Dennis Burrows</td>
</tr>
</tbody>
</table>

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November 2006
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APPENDIX B: Rosters

2006 Advisory Committee

Dennis L. Burrows, Chair
(Council on Academic Accreditation Representative)
Constance Brown Hearing Centers
Kalamazoo, MI 49048
Phone: (269) 343-2601
Fax: (269) 343-9257
E-mail: dennisb@cbrown.org

Vic S. Gladstone
(ASHA Representative)
ASHA
10801 Rockville Pike
Rockville, MD 20852
Phone: (301) 897-5700
Fax: (301) 571-0481
E-mail: vgladsto@asha.org

Arlene Earley Carney
(Council on Academic Accreditation Representative)
University of Minnesota-Twin Cities
Office of the Senior VP and Provost
110 Morrill Hall
100 Church Street, SE
Minneapolis, MN  55455
Phone: (612)-626-9545
Fax: (612) 626-8388
E-mail: carne005@umn.edu

Lisa L. Hunter
(American Academic of Audiology Representative)
University of Utah
390 S 1530 E, Room 1221 BEHS
Salt Lake City, UT 84112
Phone: (801)586-6139
Fax: (801)581-7955
E-mail: lisa.hunter@hsc.utah.edu

Stephanie A. Davidson
(ASHA Representative)
Ohio State University
Room 110 Pressey Hall
1070 Carmack Road
Columbus, OH 43210
Phone: (614) 292-1802
Fax: unlisted
E-mail: strang.7@osu.edu

Patricia Kricos
(American Academic of Audiology Representative)
Dept of Communication Sciences & Disorders
1743 NW 17th Lane
Gainesville, FL 32605-4084
Phone: (352) 392-2113, ext. 246
Fax: (352) 846-0243
E-mail: pkricos@cisd.ufl.edu

Neil J. DiSarno
(Council of Academic Programs Representative)
Missouri State University
901 South National Avenue
Communication Disorders
Springfield, MO 65804-0095
Phone: (417) 836-6511
Fax: (417) 836-4242
E-mail: neilidisarno@missouristate.edu

Lisa Lucks Mendel
(Council of Academic Programs Representative)
School of Aud & Speech-Lang Path
807 Jefferson Avenue
Memphis, TN 38105
Phone: unlisted
Fax: unlisted
E-mail: lmendel@memphis.edu
Conference Facilitator

Paul L. Gaston, PhD is Provost and Professor of English at Kent State University. He served as provost at Northern Kentucky University, dean of arts and sciences at the University of Tennessee at Chattanooga, and associate vice president for academic affairs at Southern Illinois University at Edwardsville prior to his current appointment. Dr. Gaston is currently chair of the board of directors of the Ohio Learning Network and vice-chair of the Association of Specialized and Professional Accreditors. He has been a member of American Association of Colleges and Universities (AAC&U) board of directors. He also serves as consultant with AAC&U’s SAGE group, working with universities and other groups on general education and curricular reform; implementing change initiatives; and mission refinement and articulation.

Small Group Facilitators and Recorders

The following individuals served as group facilitators and recorders during the small breakout sessions at the conference:

Facilitators

Dennis Burrows
Arlene Carney
Neil DiSarno
Lisa Hunter
Patricia Kricos
Dianne Meyer
Craig Newman
Colleen O’Rourke

Recorders

Ron Chambers
Stephanie Davidson
Vic Gladstone
Lisa Lucks Mendel
Loretta Nunez
Silvia Quevedo
Janis Shepard
Patti Tice
APPENDIX C: Recorder Templates
Major Topic Area

I. Core Areas

Core areas being discussed, primary assignment:

123

Group #: 1
Facilitator: Dennis Burrows  Recorder: Ron Chambers

REMEMBER TO STORE THIS FILE AS: (TOPIC #) (GROUP #) e.g. 24 would be the file name for topic II and group 4

Salient aspects of discussion:

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<table>
<thead>
<tr>
<th>Core</th>
<th>Non-Core (rating)</th>
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<tbody>
<tr>
<td>1. Audiologist and Patient Communication</td>
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<tr>
<td>Skills</td>
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<tr>
<td>Case history/interview tech</td>
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<td>Counseling</td>
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<td>Communication measurement scales</td>
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<td>Personal and interpersonal dynamics</td>
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<td>Cultural sensitivity and competence</td>
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<thead>
<tr>
<th>Core</th>
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<tbody>
<tr>
<td>2. Auditory Assessment</td>
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<td>Behavioral tests of auditory function</td>
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<td>Physiologic measurements of auditory function</td>
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<tr>
<td>3. Vestibular Assessment and Management</td>
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<tr>
<td>Diagnostic techniques and procedures</td>
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<td>Management and treatment strategies</td>
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### 4. Professional Issues

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<th>Inter-professional relationships and responsibilities</th>
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<tr>
<td>Ethical/legal/quality improvement issues</td>
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<td>Reimbursement</td>
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<tr>
<td>Credentialing</td>
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<tr>
<td>Practice management / healthcare marketing</td>
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### 5. Amplification / Sensory Aids

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<th>Core</th>
<th>Non-Core (rating)</th>
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<tbody>
<tr>
<td>5. Amplification / Sensory Aids</td>
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<tr>
<td>Physical and electroacoustic characteristics of amplifying devices</td>
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<tr>
<td>Methods of evaluation</td>
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<td>Dispensing</td>
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<td>Assistive devices</td>
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<tr>
<td>Implantable devices</td>
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### 6. Evidence-Based Practice

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<td>6. Evidence-Based Practice</td>
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<tr>
<td>Clinical decision process</td>
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<td>Referral procedures and case management</td>
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<tr>
<td>Clinical diagnosis and evaluation</td>
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<td>Treatment planning, implementation, and monitoring</td>
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<td>Outcomes measurement</td>
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<td>Core</td>
<td>Non-Core (rating)</td>
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<td>7. Prevention of hearing loss and conservation of hearing</td>
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<td>Public and consumer education</td>
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<td>Hearing conservation models</td>
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<td>Federal/State regulations</td>
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<td>Worker's compensation issues</td>
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<tr>
<td>Forensic audiology</td>
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</table>

| 8. Audiologic Habilitation and Rehabilitation |  |
| Communication skill assessment and intervention |  |
| Family-centered evaluation and treatment |  |
| Educational management |  |
| Effective use of sensory aids / assistive devices |  |
Audiology Education Summit

Major Topic Area
II. Value and Challenges of Clinical Externships

Question being discussed
1. What value can be gained from participating as a clinical site?

Group #: 1
Facilitator: Dennis Burrows  Recorder: Ron Chambers

REMEMBER TO STORE THIS FILE AS: (TOPIC #) (GROUP #) e.g. 24 would be the file name for topic II and group 4

Salient aspects of discussion:

•

<table>
<thead>
<tr>
<th>Primary Values</th>
<th>Secondary Values</th>
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<tbody>
<tr>
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</tbody>
</table>
Major Topic Area
II. Value and Challenges of Clinical Externships

Question being discussed
2. What are the challenges to participating as a clinical site and what are some solutions / strategies that could be used to minimize those challenges?

Group #: 1
Facilitator: Dennis Burrows  Recorder: Ron Chambers

REMEMBER TO STORE THIS FILE AS: (TOPIC #) (GROUP #) e.g. 24 would be the file name for topic II and group 4

Salient aspects of discussion:

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<table>
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<tr>
<th>Challenges</th>
<th>Solutions / Strategies</th>
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</table>
Audiology Education Summit

Major Topic Area

II. Value and Challenges of Clinical Externships

Question being discussed

3. Under what circumstances, if any, should financial support (beyond loans and grants) be provided to students during externships?

Group #: 1

Facilitator: Dennis Burrows  Recorder: Ron Chambers

REMEMBER TO STORE THIS FILE AS: (TOPIC #) (GROUP #) e.g. 24 would be the file name for topic II and group 4

Salient aspects of GENERAL discussion:

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Salient aspects of LICENSURE discussion:

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<tr>
<th>When Support Should be Provided</th>
<th>Mechanisms for providing Support</th>
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Audiology Education Summit

Major Topic Area

III. Selection of clinical sites
IV. Student preparation before placement
V. Student evaluation during placement

Question being discussed
What are the essential characteristics (considerations) … clinical site used for rotations and externships?

Group #: 1
Facilitator: Dennis Burrows  Recorder: Ron Chambers

REMEMBER TO STORE THIS FILE AS: (TOPIC #) (GROUP #) e.g. 24 would be the file name for topic II and group 4

Salient aspects of discussion:

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<th>Essential</th>
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APPENDIX D: Breakout Group Assignments
**Friday, February 3 and Sunday, February 5**

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 3</th>
<th>Group 5</th>
<th>Group 7</th>
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<td>Nancy L. Nelson</td>
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<td>Dennis D. Van Vliet</td>
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<td>Margaret M. McCabe</td>
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<td>Robert H. Withnell</td>
<td>Marni L. Johnson</td>
<td>Paul Kileny</td>
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<td>Scott K. Griffiths</td>
<td>Michael A. Hefferly</td>
<td>Rebekah F.</td>
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<td>Robert E. Moore</td>
<td>Stephanie B. McVicar</td>
<td>Michael J. Cevette</td>
<td>Cunningham</td>
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<td>Sharon A. Lesner</td>
<td>Teresa J. Garcia</td>
<td>Patrick Feeney</td>
<td>Sandy K. Keener</td>
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<tr>
<td>Sue Windmill</td>
<td>Theodore J. Glatte</td>
<td>Susan J. Brannen</td>
<td>Sue T. Hale</td>
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<td></td>
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<td>Theresa Hnath-Chisolm</td>
<td>Thomas F. Muller</td>
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<td></td>
<td>Vickie Dionne</td>
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<td></td>
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<td>William W. Clark</td>
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<td>Conrad Lundeen</td>
<td>Deborah S. Culbertson</td>
<td>Sumalai Maroonroge</td>
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<td>Claire A. Jacobson</td>
<td>Gilbert R. Herer</td>
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<td>Susan F Erler</td>
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<td>Deborah L. Carlson</td>
<td>Karen H. Richardson</td>
<td>Edward Goshorn</td>
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<tr>
<td>Erika Zettner</td>
<td>Lana Ward</td>
<td>Elaine A. Mormer</td>
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<td>Gilmour M. Peters</td>
<td>Leisha R. Eiten</td>
<td>Gary D. Lawson</td>
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<td>Heidi Kluga</td>
<td>Martha L. Harney</td>
<td>Harvey B. Abrams</td>
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<td>Ingrid K. McBride</td>
<td>Mary F. Batson</td>
<td>Jacques Georgeson</td>
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<tr>
<td>Ingrid M. Blood</td>
<td>Richard E. Talbott</td>
<td>Jaynee A. Handelsman</td>
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<td>James T. Yates</td>
<td>Richard R. Hurtig</td>
<td>Patricia A. Highley</td>
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<td>Robert Steven Ackley</td>
<td>Rhonda H. Joyner</td>
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<td>Marlene Bevan</td>
<td>Ron Chambers</td>
<td>Richard S. Saul</td>
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<td>Maureen Valente</td>
<td>Sharon Sandridge</td>
<td>Robert E. Novak</td>
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<td>Walter J. Smoski</td>
<td>T Newell Decker</td>
<td>Sumalai Maroonroge</td>
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</table>

Audiology Education Summit II Report
November 2006
Page 52
Saturday, February 4

**Group 1**
- Alice E. Holmes
- Brad A. Stach
- Deborah S. Culbertson
- Gary D. Lawson
- Ingrid M. Blood
- Michael J. Cevette
- Nancy Stecker
- Richard E. Talbott
- Sharon Sandridge
- Stephanie B. McVicar
- Susan F Erler
- Vickie Dionne

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- Alex F. Johnson
- David W. Downs
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- Maureen Valente
- Nanette L. Sturgill
- Paul Kileny
- Rebekah F. Cunningham
- Sumalai Maroonroge
- Theresa Hnath-Chisolm
APPENDIX E: Presentations

Welcome and Introductions
Dennis L. Burrows

Welcome

Audiology Education Summit II:
Strengthening Partnerships in
Clinical Education
February 3-5, 2006
Phoenix, AZ
Welcome to Phoenix

Advisory Committee

- AAA
  - Lisa Hunter, Ph.D.
  - Pat Kricos, Ph.D.
  - Craig Newman, Ph.D.
- ASHA
  - Neal Shepard, Ph.D.
  - Stephanie Davidson, Ph.D.
  - Vic Gladstone, Ph.D.
- CAA
  - Dennis L. Burrows, Ph.D. - Chair
  - Colleen O'Rourke, Ph.D.
  - Arlene Carney, Ph.D.
- CAPCSD
  - Dianne Meyer, Ph.D.
  - Lisa Lucks-Mendel, Ph.D.
  - Neil DiSarno, Ph.D.
ASHA National Office Staff

• Patti Tice
• Tess Kirsch
• Loretta Nunez
• Silvia Quevedo

Why are we here?

“You got to be very careful if you don’t know where you are going because you might not get there”

Yogi Berra
Historical Perspective

• 1987 Future of Audiology
  – Lu Beck; George Osbourn; Jim Jerger; Jay Hall; Rick Talbott
• 1989 AAA Task Force on Professional Doctorate
  • Allen Feldman; Barry Freeman; Susan Jerger; Rich Wilson; Rick Talbott, Chair
• 1988 ADA “Move The Mountain Conference”
  • Move to the doctoral level -AuD
• ASHA LC-789-
  • Move to separate professions
• ASHA 1993-Academic Feasibility of Clinical and Professional Doctoral Degrees in Audiology (LC 44-93)
• 1995 AuD National Standards Council –Jim Jerger
• 2001 CAPCSD-ASHA-AAA Joint Ad Hoc Committee on Standards for Non-Entry level Programs in Audiology
  • Fred Bess; Jan Ingham; Rick Talbott; John Ferraro; Jim Mahshie; Jack Roush
• Big Ten Consensus Conference
• AAA Consensus Conference on the 4th Year AuD Student
• 2004 CAPCSD Task Force on Supervision-John Ferraro, Chair
• 2005 Audiology Education Summit – Dennis Burrows, Chair
• 2006 Audiology Summit II – Dennis Burrows, Chair

Summit Planning

• Many topics; too little time
• The necessity to be able to make an impact within the time we have available
• Focused on:
  – Clinical education
Topics of Discussion

– Core Areas of Audiology Practice
– Value and Challenges of Clinical Externships
– Selection of Clinical Sites
– Student Preparation Before Clinical Placements
– Student Evaluation During clinical Placements

The Process

• Key Presentations
  – Rick Talbott
  – Arlene Carney
  – Sharon Sandridge
  – Sharon Lesner
  – Harvey Abrams
  – Clinical Panel
    • Colleen Noe; Paul Kileny; Marlene Bevan; Gay Ratcliff; Susan Brannen.
• Breakout Groups
  – BVD
    • Brainstorm
    • Vote
    • Discuss
• Group Reports
The Final Product

• Presented at CAPCSD
• Developed by the sponsoring organizations and disseminated

Our Charge

“I have opinions of my own – strong opinions – but I don’t always agree with them.”

– George W. Bush
Our Facilitator

PAUL L. GASTON
Provost
Kent State University
Audiology Clinical Education
Then, Now, and Future

Arlene Earley Carney
University of Minnesota

Overview: From Past to Present

- Redesign of a Profession
- Process to Outcome Standards
- Knowledge and Skills
- Extended and Advanced Clinical Education
- Characteristics of Audiology graduates today
Redesign of a Profession

- **Audiology**
  - Masters entry-level
  - Less independent practitioner
  - Increasing scope of practice

- **Audiology**
  - Doctoral entry-level
  - Independent practitioner
  - Broad scope of practice
  - Depth of expertise

---

Redesign of a Profession

- Required the redesign of professional standards for preparation of audiologists
- Certification Standards from the Council of Professional Standards (Council For Clinical Certification)
- Certification Standards from the American Board of Audiology
## Process to Outcome Standards: COPS and CFCC Standards

<table>
<thead>
<tr>
<th>1993</th>
<th>2007</th>
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<tbody>
<tr>
<td>Each standard a process statement</td>
<td>Some process standards</td>
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<tr>
<td>Specified a graduate degree (mostly master's degree)</td>
<td>Specifies a doctoral entry-level degree by 2012</td>
</tr>
<tr>
<td>Specified minimum number of graduate credits for the degree</td>
<td>Specifies minimum number of graduate credits for the degree</td>
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## Process to Outcome Standards: COPS and CFCC Standards

<table>
<thead>
<tr>
<th>1993 Processes</th>
<th>2007 Outcomes</th>
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<tbody>
<tr>
<td>Specified course content areas and credits</td>
<td>Specifies knowledge areas</td>
</tr>
<tr>
<td>Specified number of client/patient contact hours</td>
<td>Specifies skills</td>
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</tbody>
</table>
Process to Outcome Standards: COPS and CFCC Standards

☐ 1993 Process
☐ Supervision of clinical education specified by % time and activity.
☐ Credential for supervision is CCC.

☐ 2007 Process & Outcome
☐ Supervision based on student ability and experience.
☐ Credential for supervision is CCC.

Process to Outcome Standards: COPS and CFCC Standards

☐ 1993 Process
☐ Clinical fellowship year following the granting of a graduate degree

☐ 2007 Process
☐ 12 mos FTE experience is part of the doctoral degree
Knowledge and Skills

☐ Listed in standards from both CFCC and ABA
☐ Form the basis of curriculum in Audiology doctoral programs
☐ Both academic preparation and clinical education are affected.

Knowledge and Skills

☐ Formative assessments
☐ Summative assessments
☐ Need to track outcomes for knowledge and skills
Key Conferences

- The AuD Externship Experience
- Audiology Summit I

The AuD Externship Experience

- January 2004
- Sponsored by the American Academy of Audiology
- Participants from Audiology doctoral programs and practitioners
- Focused on the “dedicated clinical training component of the AuD”
- Presentations and discussion
The AuD Externship Experience: Terminology

☐ Extern
☐ Preceptor
☐ Clerkship
☐ Rotation
☐ Externship

The AuD Externship Experience

☐ Definition of standards for student preparation prior to enrollment in an externship
☐ Definition of standards for the preceptor and the externship site
☐ Partnership between the university, externship site, and preceptor
The AuD Externship Experience

- Status of the extern
- Expectations of the preceptor

Audiology Summit I

- January 2005
- ASHA, CAA, and CAPCSD
- Assembled faculty, clinical educators, representatives from related professional organizations
- Combination of short presentations and break-out discussion sessions
Audiology Summit I: Topic Areas

- Academic Curriculum: Breadth & Depth
- Clinical Curriculum: Breadth & Depth
- Faculty, Resources, & Assessment
- Interactions: Academic & Clinical Relationships

Audiology Summit I

- Definition:

  Essential
  adj. basic or indispensable; necessary
  essential ingredients
  n. Fundamental; necessary or fundamental object or thing
Audiology Summit I

- Focused on essential characteristics of:
  - optimal academic curriculum
  - optimal clinical curriculum
  - optimal number of faculty and qualities of academic and clinical faculty
- Focused on interactions between academic and clinical settings

Audiology Summit II

- February 2006
- Co-sponsored by AAA, ASHA, CAA, and CAPCSD
- Focus on clinical education
Audiology Summit II

- Core areas – those areas of clinical practice requiring a depth of skill upon completion of the doctoral program regardless of the individual program’s specific mission.

- Depth of skill or proficiency is the level of independence necessary for practitioners to enter the profession, seeking expert advice when needed.
Audiology Summit II

- Focuses on essential characteristics of clinical education:
  - identify the quality indicators of the sequencing of academic and clinical preparation for placement of students throughout the program

Audiology Summit II

- Focuses on essential characteristics of clinical education:
  - design essential methods for evaluating student performance
Audiology Summit II

- Preceptor is the individual who supervises and mentors a student during a clinical education experience.

- Rotation is a short-term clinical education experience that may occur either in a university clinic or an external placement setting throughout the student’s Audiology doctoral program.
Audiology Summit II

- Additional Terminology:
  - Externship is the final clinical education experience in an Audiology doctoral program.

Audiology Summit II

- Focuses on essential characteristics of clinical education:
  - describe the challenges of clinical externships
Facilitator Opening Remarks
Paul L. Gaston

It is a genuine pleasure to join you for the Audiology Education Summit II, a conference emphasizing the strengthening of partnerships in clinical education.

I have had the privilege of taking part in a number of conferences convening practitioners and educators from a number of professions, but I have never taken part in a conference more thoughtfully planned. Your Advisory Committee has worked creatively, diligently, and resourcefully to make this summit an enjoyable, enlightening, and productive experience for you – as well as a significant contribution to your profession.

I also want to offer a personal thanks for the opportunity to learn more about your profession – not enough to be dangerous, but more than enough to be annoying. For instance, having learned what “cerumen” means, I have been alert for news. And there has been news! On January 30, the New York Times reported that the switch of a single DNA unit in the ATP-binding cassette C11 gene determines whether a person has wet or dry earwax. This information in turn provides an infallible signature that links Native Americans with their Siberian ancestors. Hence, what you may regard as the clinical removal of cerumen, I now may describe as tampering with archeological evidence.

The other element I have found distinctive in the planning for the conference is the confidence placed in you by the Advisory Committee. I have never before taken part in a conference that depended so fully on its participants. That is why in your summit packet there appears a reminder about strategies you can follow to ensure the success of the summit. I doubt that you will find much there that is new. Many of you gained valuable experience in Summit I. Many of the rest of you have contributed to small group discussions in the past.

However, just as experienced mountaineers run through a checklist before beginning a climb up the mountain, we should review basic strategies before beginning our own approach to the summit.

- Experienced discussants, like experienced climbers, consider carefully the issue(s) at hand. They then speak thoughtfully and directly to them. There is always the temptation when meeting with colleagues and acquaintances to spend more time than is necessary in getting acquainted. For that purpose, the hotel has provided a special facility: it is called the “bar.”
- Like experienced climbers, experienced discussants attend carefully to the points others are making and signal their attentiveness through their posture and by sustaining eye contact. That kind of communication has saved many a climber on a dangerous slope – and it can ensure a productive group discussion.
- Experienced climbers pay close attention to stragglers in the climbing party. So, too, do experienced discussants draw others into the discussion, especially when they are aware that others may have perspectives that would benefit the group.
- Sometimes, in the thin air, climbers may indulge in inappropriate behavior or uncivil language. That would never happen here. But by analogy, experienced discussants...
give no attention to minor offenses and assist the facilitator in responding to major ones.

- Just as experienced climbers understand the role of the guide, so too do experienced discussants support the facilitator by understanding her or his role. That role is to manage the discussion for the benefit of the group, not to contribute to its content. However, if you happen to know that the facilitator has a perspective that might benefit the group, you may want to ask that she or he share it.
- Experienced climbers keep records. So, too, experienced discussants track the major areas of consensus by taking brief notes. Even though there will be a recorder in each session, your notes can contribute to the concluding overview.
- Finally, experienced discussants contribute to the closing process by suggesting areas of consensus and synthesis and possible follow-up action.

Of course, any approach to a summit can run into trouble. So you need to be prepared to deal with them. For instance, you may have colleagues that prefer plenary sessions, where they can learn from an authority, to group discussions, where they are expected to make a contribution. Perhaps group discussions they have experienced have not used their time well. You might remind your colleagues that the group discussions planned for Summit II have been carefully planned to draw on their experience in productive ways and to use their time well. However, the effectiveness of such discussions depends in part on your colleagues – and on you. By taking an active and constructive role, you can enhance your experience and that of your colleagues.

Sometimes a member of the group begins to take over the discussion. You may find the facilitator reluctant to repress a persistent contributor. As a discussant, you may know far better whether an individual’s contribution is helpful or simply overbearing. If you feel the discussion has reached a point of diminishing returns, you might consider taking a more active part yourself, perhaps complimenting the persistent contributor before turning the discussion in a more productive direction. If the persistent contributor then attempts to engage you directly in a point, counter-point, make it clear that you are directing your remarks to the facilitator and that you support her or his leadership.

To meetings such as this one, some of you may have brought important concerns not on the agenda. I am reminded of the patient who consulted an audiologist for mild hearing loss. After the examination, the audiologist says, “Jim, we can correct your hearing loss with the proper fitting of an appropriate hearing aid.” Jim responds, “I want a second opinion.” And the audiologist says, “OK, I also think you might want to lose a little weight.” It can be important to stay with the agenda at hand.

Still, you may have an interest in discussing that extraneous concern once you are with your colleagues. The hotel has a facility for this purpose also. It is called “the other bar.” As your notes suggest, the priorities of the different sessions and discussions have been very carefully planned by your organizing committee. Hence, any attempt to introduce some other topic, however important, may hinder the group from completing its agenda.
One other problem is that participants may take too seriously the given agenda and begin a lengthy “point, counter-point.” If it becomes clear to you that their private argument is not advancing the interests of the group, you might consider asking the discussants to summarize briefly each other’s best points as a point of departure for further discussion by the group. Without appearing impatient, you can help the facilitator make it clear that the group should then move on. If all else fails, offer to buy both of them a drink.

With these principles in mind, you are about ready to begin the ascent. There are experienced guides among us, and you are in very good condition. It should take us a little more than two days. So let’s begin the climb.

One other reminder: no alcohol!
Clinical Education: Comparative Anatomy

Rick Talbott, Ph.D.
Dean- College of Allied Health Professions
University of South Alabama
Mobile, Alabama

Workshop Objectives

Identify and describe quality indicators of clinical education that contribute to the development of skilled professionals.

Compare and apply clinical education models from other health professionals.
Clinical Education: Comparative Anatomy- Superordinate Goals

- Utopian – Consensus within audiology community regarding essential elements of and educational sequence for clinical education for all doctoral programs
- Pragmatic – Consensus within majority of audiology community regarding essential elements of and educational sequence for clinical education for all doctoral programs

Clinical Education: Comparative Anatomy-Immediate Goals

- Assumption Is That Best Practices (As Applied To Clinical Education) Are Still Emerging
- Purpose Of Presentation: To Provide Background For and Stimulate Discussion of How To Achieve At Least The Pragmatic Goal
- Food For Thought – Segue To Discussion Groups
  - Roadmap for Deliberation
  - Quality Indicators of clinical education
  - Overview of Extant Clinical Education Models In Other Health Professions
  - A Few Confounding Variables
    - Financial Support
    - Programs Needed vs Programs Existing
Roadmap For Continued Deliberation

- It is **not the model** but the **outcome** that is critical--- e.g. SACs recent model change- define learning objective, plan delivery, deliver, assess, modify, repeat on regular basis.
- Desired Outcome? MAP---Delivery of Best Practices in diagnosis and treatment of individuals with auditory and vestibular impairment.
- *First* set goals and implementation strategies that insure quality patient care-- second, set goals for professional enhancement- are not mutually exclusive but the first is a sine qua non for the second.

Quality Indicators--Clinical Learning Objectives and External Controlling Variables

- Objective--COMPETENT-ETHICAL CLINICIANS
- Achieving Goals-- Critical *A priori* considerations
  - Academic Culture
  - Inter and Intra Professional Environment
  - National and State Regulatory Environment
  - Economic Realities
  - Butterfly Effect
Lessons from Other Professions

Some General Comparisons
Clinical Education Approaches
Discussion Implications

<table>
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<tr>
<th></th>
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<td>~11,000</td>
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<tr>
<td>Optometry</td>
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<td>Pharmacy</td>
<td>~230,000</td>
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<td>Dentists</td>
<td>~152,000</td>
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<td>Physical Therapists</td>
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<tr>
<td>Physician Assts</td>
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<tr>
<td>Podiatrists</td>
<td>~13,263</td>
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</tr>
</tbody>
</table>

* Bureau of Labor Statistics
General Comparisons - Projected Growth 2012*

- Audiology  29% (14000)
- Optometry  17% (35000)
- Pharmacy   30% (299000)
- Dentists   4% (158000)
- Physical Therapists  35% (183000)
- Physician Assts  48% (93000)
- Podiatrists  15% (15000)

*Bureau of Labor Statistics

Number Of Programs of Selected Professions

- Audiology  72
- Optometry  17
- Pharmacy   89
- Dentists   55
- Physical Therapists  209
- Physician Assts  130
- Podiatrists  8
**Graduates Per Year & Mean Graduates Per Program**

<table>
<thead>
<tr>
<th></th>
<th>Total Grad.</th>
<th>Mean/Program</th>
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<tbody>
<tr>
<td>Audiology</td>
<td>875</td>
<td>12</td>
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<tr>
<td>Optometry</td>
<td>1307</td>
<td>77</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>8158</td>
<td>92</td>
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<tr>
<td>Dentists</td>
<td>4443</td>
<td>81</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>4913</td>
<td>24</td>
</tr>
<tr>
<td>Physician Assts</td>
<td>4592</td>
<td>35</td>
</tr>
<tr>
<td>Podiatrists</td>
<td>386</td>
<td>48</td>
</tr>
</tbody>
</table>

**Clinical Models**

<table>
<thead>
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<th></th>
<th>In house</th>
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<tbody>
<tr>
<td>Optometry</td>
<td>In house</td>
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<tr>
<td>Pharmacy</td>
<td>In house and clinical</td>
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<tr>
<td>Dentists</td>
<td>In house</td>
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<tr>
<td>Physical Therapists</td>
<td>Externships</td>
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<tr>
<td>Physician Assts</td>
<td>Practice Settings</td>
</tr>
<tr>
<td>Podiatrists</td>
<td>Internship and Residency</td>
</tr>
</tbody>
</table>

No clear cut “best model”–
Observations re: “Others”

Intra vs Inter Professional Uniformity

Potential Outcomes from Summit Deliberations

Number of Academic Programs

Efficacy of Admissions Examinations

Is the “4th” year experience evolving into an In-house CFY?

Student Funding Challenges

Essentials for Models

- Ethical Considerations of student practice
- Homogeneity of OUTCOME IS CRITICAL--not necessarily the process---means homogeneity of clinical education at a minimum and perhaps homogeneity of academic clinical experience
  - Process homogeneity addresses pragmatic considerations not necessarily patient care
Financial Support

- Survey: 29 or app. %40 of programs responded–
- 68% provide financial assistants in form of GA or other assistantships– range from $1000 to $8000 per year with out of state tuition waiver most typical incentive-- Those with support most likely to respond?
- ALARM: Student negotiated support with “externship” placement was policy in app. 25% of responding programs– challenge to homogeneity of learning outcomes?

First Professional Degree Status

- Report of December 2005 TRP
- Probable Outcome and Effect on Audiology
- Input from Group Discussions
**TRP Recommendations**

- IPEDs collect data in 3 categories within CIP - masters, academic/research doctorate, other doctorate
- Data would focus on intent of the degree program
- Eliminate First Professional degrees/certificates and replace with:
  - Masters research/scholarship
  - Master’s all others
  - Doctor’s research/scholarship
  - Doctor’s all others
  - Post-master’s certificates

**Lagniappe—Entry to Median Salary Comparisons**

- Audiology $56,850
- Optometry $101,000
- Pharmacy $89,723
- Dentists $173,000
- Physical Therapists $59,799
- Physician Assts $76,597
- Podiatrists $123,630

Note: Multiple sources of data
WHAT’S LEFT TO DO

-Should there be a “clinical template”
  If yes, for entire program or just the externship-
  If for entire program, prescription for competence levels and prescribed externship requirements?
  If no, emphasis on outcome standards is essential.
  Identification and agreement on thresholds of competence (formally AKA minimal standards)
Core Areas in Audiology Education

Colleen M. Noe

Core Areas of Clinical Practice

- Colleen M. Noe, Ph.D.
- Chief, Audiology & Speech Pathology
- VA Medical Center

James H. Quillen VAMC
Mountain Home, TN

Colleen M. Noe, Ph.D.
Chief, Audiology & Speech Pathology
About our medical center...

- 400 acre facility
  - VA Medical Center
  - Quillen College of Medicine
- Tertiary care hospital
  - 110-bed general medical and surgical hospital
  - 120-bed nursing home facility
  - 348-bed domiciliary

About our Audiology staff...

- 15 Audiologists
  - 8 Ph.D. (4 research)
  - 1 AuD.
  - 6 MS/MA (4 research)
About our clinic...

Clinical Services
- Diagnostic evaluations
- Audiological rehabilitation
- Vestibular assessment/rehabilitation
- Electrophysiological assessment
- Tinnitus assessment/rehabilitation
- Compensation & Pension evaluations

About our clinic...

Fiscal Year 2005 data
- 11,700 patient visits
- 2,385 hearing evaluations
- 4,130 hearing aids issued
- 204 vestibular assessments
- 260 electrophysiology assessments
- 130 tinnitus evaluations
### About our education program...

**Academic Affiliations**
- East Tennessee State University
- Ohio Consortium (Akron and Kent State)
- University of South Florida
- University of Tennessee-Knoxville
- Gallaudet University

### About our education program...

East Tennessee State University
- VA clinic serves as primary clinic site
- 7 Audiologists - faculty appointments
- Clinic rotations begin during 1st semester
About our program...

Clinical Rotations

- **1st year students**
  - Paired with advanced students for observation

- **2nd & 3rd year students**
  - Direct supervision by licensed Audiologist

- **4th year students**
  - Direct supervision as needed by licensed Audiologist

General Expectations

- Good work ethic and attitude
- Computer skills
- Responsible and punctual
- Willing to accept supervision and constructive criticism
- Willing to follow appropriate dress code
Student Evaluations

- Goals are established at the beginning of each semester
- Assessment are completed at midterm and the end of each semester
- Clinical competencies are adjusted based on clinical experience and coursework completed

Expectations by the end of the 1st year:

Complete the following *with direct supervision*:

- Basic diagnostic evaluation on a cooperative adult
- Knowledge of when/why to conduct special tests
- Basic understanding of referral criteria for ENT/ABR/VNG/tinnitus consults
- Basic hearing aid repairs
### Expectations by the end of the 2nd year:

Complete the following *with direct supervision*:

- Diagnostic evaluation with appropriate interpretation and referrals
- Technical aspects of site of lesion ABR, vestibular assessment, and hearing aid fittings

### Expectations by the end of the 2nd year (cont.):

- Hearing aid selection
- Basic counseling skills in audiological rehabilitation
Complete the following \textit{with supervision}:

- Interpretation of diagnostic results with appropriate referrals
- Interpretation of vestibular assessment, ABR site of lesion testing, and real ear insertion gain
- Basic tinnitus diagnostic and follow-up evaluations

Expectations by the end of the 3rd year:

- Hearing aid orientation and follow up
- Group audiological rehabilitation
- Knowledge of CPT codes and professional issues
Expectations by the end of the 4th year:

Complete the following *with minimal supervision*

- Diagnostic assessment with accurate interpretation and appropriate referrals
- Hearing aid selection, fitting, orientation and follow-up
- Vestibular assessment, interpretation, and referrals (VNG, rotary chair, posturography, VEMP)

Expectations by the end of the 4th year:

- Site of lesion ABR assessment, interpretation, and referrals
- Group audiological rehabilitation
- Tinnitus assessment and rehabilitation
Desired skills when hiring a new graduate

- Desire for career with Department of Veterans Affairs
- General Audiological Practitioner
- Able to objectively review professional journals
- Be effective in an interdisciplinary health care team approach
- Computer and data management skills
The Emerging AuD Professional should demonstrate:

- Mastery of the administration of the basic tests used to evaluate hearing.
The Emerging AuD Professional should demonstrate:

- Knowledge of the theoretical basis for evaluation of hearing
  - Should understand the specific tests required to generate a clinical description of hearing and how is this information used; medically, legally, and rehabilitatively.

The Emerging AuD Professional should demonstrate:

- Knowledge of the impact of hearing loss and deafness on the lifestyles of children and adults.
  - Should understand the educational options for the deaf.
  - Should understand financial and emotional outcomes associated with deafness.
  - Should understand the impact of acquired vs. congenital deafness.
The Emerging AuD Professional should demonstrate:

- Knowledge of the impact of partial hearing impairment on the lifestyles of children and adults.
  - Should understand the impact of hearing impairment on education.
  - Should understand the financial and emotional outcomes associated with hearing impairment.
  - Should differentiate between the impacts of prevocational, vocational or post-vocational hearing impairment.

The Emerging AuD Professional should demonstrate:

- Basic counseling skills to assist in the rehabilitation of children and adults with hearing loss.
  - Should master basic skills of grief counseling for parents of children identified with hearing loss.
  - Should be prepared to assist adults with counseling for behavior modification necessary for successful acceptance of hearing rehabilitation.
  - Should recognize referral indicators when basic counseling strategies fail.
The Emerging AuD Professional should demonstrate:

- Knowledge of the basic applications of amplification.
  - Should demonstrate knowledge of the basic technology options available and when they are appropriate for use.
  - Should understand the implications for appropriate hearing aid style selection.
  - Should understand what factors influence successful hearing aid usage.
  - Should utilize a proven protocol or methodology for the selection and evaluation of amplification.

The Emerging AuD Professional should demonstrate:

- Business administration principals for the management of small business.
  - Basic principles of accounting
  - Ability to develop a basic business plan
  - Financial aspects of sound health care delivery.
The Emerging AuD Professional should demonstrate:

- Basic clinical research skills for the development of evidence based practices and a “best practices” model.
  - Development of research models for evidence based practices.
  - Application of current research findings in the creation and evaluation of a “best practices” model.
The Public Schools

Susan J. Brannen
Monroe 2 BOCES
3599 Big Ridge Road
Spencerport, NY 14559
585 352 2449
sbrannen@monroe2boces.org

Core areas

• Assessment- Three to 21 years; children with a range of abilities
  – Comprehensive audiological (otoscopy, immittance measures, pure tones, speech, OAE’s, unsedated ABR, ASSR)
  – Amplification verification measures
  – Selection and fitting of educational amplification
  – Auditory disorders e.g. auditory processing disorders
Core Areas

- Communication- Written and Oral
  - With kids
  - With parents
  - With teachers
  - With related service providers
  - With the dispenser
  - With school administrators
  - With medical providers

Core Areas

- Classroom Acoustics-measurements, modifications
- Functional Listening Assessments
- Hearing Assistive Technologies
- Genetics, Syndromes, Developmental and Educational Profiles
Core Areas

- Who is the client? (student, parent, teaching team, district)
- From the fitting/mapping to full time classroom use
- Strategies for all situations
  - Direct auditory rehabilitation
  - Problem solving for classroom learning, social interactions, extended learning.

Core Areas

- Understanding educational law- Individual with Disabilities Education Act (IDEA), Individual Education Program (IEP), No Child Left Behind, Medicaid in the Schools, the Family Educational Rights and Privacy Act (FERPA) vs the Health Insurance Portability and Accountability Act (HIPAA)
CORE AREAS IN AUDIOLOGY EDUCATION

Paul R. Kileny, Ph.D., FAAA
ASHA Fellow
University of Michigan Health System

Audiology in a Medical Setting

• Initially, define hearing and hearing loss
• Correlate hearing loss with pathology (i.e., Carhart,)
• Rehabilitation, hearing aids (WW II, Bergman)
• Jerger: dx. battery approach, cross-check principle, categorization, pathology/test results
• 1970s: electrophysiology expanded our diagnostic (acoustic neuroma, infant hearing testing) and interventional (IOM) horizons
Iowa: Doctoral Students During The Late 70's

- Neil Shepard
- Michael Gorga
- Pat Stelmachowicz
- Rich Tyler
- Robert Novak
- Larry Dalzell
- Conrad Lundeen
- George Haskell
- Paul Kileny
- Over 450 publications

Audiology Test Battery

- The world of audiology in 1978:
  - ABR in its infancy
  - OAE's yet to come
  - There was no IOM
  - Vestibular testing: mostly calorics, ocular pursuit, Barany chair (no posturography, sophisticated rotary chair)
  - Facial motility disorders: topognostic testing, i.e., taste, Schirmer's
Audiology Test Battery

- Retrocochlear pathology: Differential Diagnosis
  - ABLB
  - SISI
  - TONE-DECAY
  - REFLEX DECAY
  - ABR
  - OAE
  - IMAGING: MRI WITH GADOLINIUM

Audiology in a Medical Setting

- “Just do hearing tests” or……
- Provide unique clinical services
- Contribute to teaching
- Contribute to research
- **Teamwork, the Michigan Model**: collaborate to provide the patient with the best possible care - take advantage of each specialty’s unique but complementary knowledge and skills
Audiology 2006

• From US News and World Report, January 2006:
  – “Audiologist. Careers in which you help people, one-on-one, are rewarding, and the work environment is usually pleasant. Audiology is my favorite. Pay and prestige are excellent, and the job market will be strong because as baby boomers age, their hearing fades. And audiologists will be offering ever better hearing aids. The annoying conventional aids are being replaced by more pleasing computer-controlled ones. A final plus is that audiology is an under-the-radar career—few people consider it, so competition isn’t as keen as it deserves to be. One downside: Universities’ relentless push to keep more students longer is creating pressure to make audiology programs doctoral.”

Audiology at Michigan

• Scope of Audiology/Electrophysiology
  – Over 14,000 visits/year
  – Electrophysiology incl. facial and laryngeal EMG
  – Full-scale intraoperative monitoring program
  – Newborn hearing screening
  – School audiology
  – Cochlear Implants (T. Zwolan, Ph.D.)
  – State of the art Vestibular program (Jaynee Handelman, Ph.D.)
Audiology/Otolaryngology

Audiology

Audiologist

Technician

Testing

Clinician

Testing

Interpretation

Management

Audiology in a Medical Setting

• Strong and effective collaboration with otolaryngology colleagues in all subspecialties
• Mutual benefits in delivery of clinical services, teaching, and research
• Several models of interaction: IOM, CI program, neonatal hearing loss, o/p neurodiagnostics
Audiology/Otolaryngology

The Hearing-Impaired Child

Suspicion of Hearing Loss

Audiology

Normal

Hearing Loss

Audiology F/U

ENT

Medical

Non-Medical

ENT

Audiology

Audiology/Otolaryngology

Cochlear Implant Protocol

Patient with Hearing Loss

Audiology

Quantify and characterize hearing loss

CI Candidate?

Yes

Audiology Prom Test EABR

ENT Exam Imaging Surgery

Audiology Programming Long-term Management

NO

Audiology F/U
Audiology in a Medical Setting

• Educational needs:
  – The AuD: lack of standardization
  – Audiologists need to be better trained to function in medical environment
  – 2+1 v. 3+1- year programs: even with intensive training cannot achieve same goals in 3 years as in 4 years, i.e., diversity and intensity of patient contacts (we should not sell wine before its time..)

• Educational needs:
  – Didactic preparation needs to be provided in relevant clinical areas by academic personnel with relevant, up-to-date experience
  – Course content needs to be reviewed and revised frequently to reflect current clinical practice trends
  – The number of semester hours needs to be commensurate with complexity and required depth
Audiology in a Medical Setting

• Educational needs:
  – Medical aspects of hearing loss
  – Auditory test administration: principles, technical aspects and test selection
  – Basic knowledge of clinical auditory electrophysiology
  – Basic knowledge of rehabilitation of hearing loss including hearing aids, cochlear implants and common types of ear surgery

• Basic knowledge of vestibular function, vestibulo-cochlear pathologies, and basic principles of vestibular testing (i.e., calorics, rotary testing)

• All of the above knowledge needs to be at a basic but SOLID level.

• For second or third year clinical rotations, I would recommend clinical observations only in areas of previous didactic coursework
Audiology in a Medical Setting

• The clinical placement site should also create a didactic curriculum consisting of lectures and seminars geared to better acquaint the student with medical audiology. These would include lectures and seminars already planned for the benefit of medical residents and fellows.

Audiology in a Medical Setting

• 1. The didactic training of students should be representative of the current audiology scope of practice: i.e., one lecture on cochlear implants in a 4-year program is inadequate

• 2. It is important to avoid sending students to clinical placements representing subject matters that have not been adequately covered in the classroom.
The Community Speech & Hearing Center

Or

How I Learned to Love "FLEXIBILITY"

What to Expect in a Community Center or Clinic?

Lots of "Very’s"

1. Very challenging
2. Very unique
3. Very collaborative & team oriented
4. Very community involved
5. Very Busy
6. Very REWARDING
National Association of Speech & Hearing Centers (NASHC)

- **Began in 1976**
- 59 member agencies
- **East coast, west coast & everything in between**
- Meet twice per year and rotate sites – agenda, invited speakers, CEU’s
- **Minimum standards for accreditation**
Central Florida Speech & Hearing Center
Lakeland, Florida
(45 minutes to WDW!)

- Founded in 1960
- 30 staff members & 27 member Board of Directors
- Four AUD Audiologists & one Assistant
- Five SLP’s, one Assistant, one Secretary
- Speech & Hearing preschool, Industrial Services, Development, Accounting, ALD Center and Business Office
- $1.5 m budget, fee for ALL services, 25% other funding
- Not-for-profit
- Accepting students since 1970
- President since 1975

“Show Me The Money!”

- NON-PROFIT IS A TAX DESIGNATION, NOT A MISSION.
- IF WE WANT TO MEET OUR MISSION, WE HAVE TO MAKE OUR MARGIN
- THEREFORE, WE MUST CHARGE FOR SERVICES SO WE CAN PAY STAFF & BILLS
STUDENT EXPECTATIONS

STEP I: Personal
And
STEP II: Clinical

Why STEP I Personal?
Because we wear lots of hats in a community center!!
PERSONAL REQUIREMENTS

- Successful Interview as if applying for a job
- Willing to be VERY flexible with us and we will be sure you get the experience you need
- Willing to abide by Center policies, especially dress code
- Willing to adhere to days and times scheduled
- Willing to help Audiology staff members in aspects of the program
- University is willing to stay in contact with Center, especially if issues arise.

And, according to my staff:

“It is really hard to recover from a BAD one”
The “Age Flexibility” Hat
Willing to test patients of ALL ages

- The fetal alcohol syndrome 6 day old
- The 96 year old stroke survivor
- The recently deafened young adult
- The autistic five year old
- The 80 year old asthmatic hearing aid user
- The Hispanic family with the non verbal 2 year old

The “Counseling Flexibility” Hat
Ability to counsel patients of all types

- The Medicaid patient
- The private pay grocery store owner (5 states 800 stores)
- The non-English speaking illiterate family
- The Bureau of Disability young male
- The Citrus Manufacturing Co employee with work loss injury & it’s a court case
- The Sertoman who wants free services
- The prison inmate needing a hearing aid
The “Program Flexibility” Hat
Willing to work where needed

- Diagnostics with patients of ALL ages
- Industrial testing or audiogram review
- APD testing and “FastForword” Program
- Hearing Aid sales and repairs
- Hearing screenings at local preschools

STEP TWO: Clinical Skills

- We are “assuming” that you have the skills to work in a community clinic or your university would not have suggested or encouraged you to apply and interview!
- That is a VERY BIG ASSUMPTION!
We Expect You To Have
ALL THE BASICS
(80-100% on your own)

- Air, bone, speech
- Masking
- Temps, OAE's
- MCL's, UCL's
- ABR, APD, ENG
- VRA & Play Audiometry
- Case history taking
- Appropriate counseling
- Ear impressions
- Hearing Aids
  *Basic Listening Check
  *Electro analysis
  *Cleaning - retubing
  *Ordering, filling out forms
  *Programming
  *Selection & fitting
  *Counseling

HIRING A NEW AUD GRAD?
(While all things to all people at all times!)

- Pediatric experience
  Comfortable working with children, especially 0-5
- Must also like working with adults
- Must know hearing aids
- Must be willing to sell hearing aids and ALD's
- Bilingual a plus
- Special populations & difficult to test
- Likes variety
- Team player
- Collaborate with SLP
- FLEXIBLE
- Willing to make community presentations
- Good computer skills
If YOU want to make a difference

Consider joining the team at a community speech & hearing center
Core Areas

Summary

- Didactic training of students should be representative of the current audiology scope of practice.
- Placement at clinical sites should contingent on coursework completed.
- Evidence-based practice should be emphasized in the classroom and the clinic.
- Goals and competencies should be communicated to both students and external clinic supervisors.
Instructions for  
BREAKOUT #1

Friday morning, February 3

**Topic 1: Core Areas in Audiology Education**

- Using the attached list as a starting point, identify the core* areas of clinical practice for graduates of a clinical doctoral program in Audiology. Begin with the core areas assigned to you by your facilitator and then proceed with remaining core areas as time permits.

- Identify any sub-areas that are NOT Core (important but not critical) and delete them from the list.

- Rate the deleted items above on a 3-point scale, using the attached diagram as a guide.
  - 1 = closest to Core
  - 3 = farthest from Core

- Are there any additional Core Areas that should be added to the list?

* Core Areas are those critical areas of clinical practice that require a **depth of skill** or **proficiency** upon **completion** of the doctoral program, regardless of an individual program’s specific mission, in order to begin professional practice.

- Depth of skill is defined as the level of independence necessary for practitioners to enter the profession, while seeking expert advice when needed.
- Proficiency is defined as a skill level that is consistent or developed, requiring guidance or infrequent consultation (American Academy of Audiology, Professional Standards Subcommittee of the Education and Standards Committee).

Note: All core areas require prior background knowledge, synthesis and integration, professionalism, and cultural competence.
The Value and Challenges of Clinical Externships

Colleen M. Noe

James H. Quillen VA Medical Center

Colleen M. Noe, Ph.D.
Chief, Audiology & Speech Pathology

Advantages for the VA

- Shaping future audiologists and fostering an interest for VA careers
- Students challenge staff to stay current with professional literature and practices
- VA mission includes clinical training and education
### Advantages for the students

Students gain extensive training with:

- Extensive training with geriatric population
- Diagnostic evaluations
- Hearing aids
- Vestibular assessment
- Tinnitus
- Site of lesion testing

### Advantages for the students (cont.)

- Training is evidence-based and didactic
- Clinical training mirrors classroom instruction
- Students develop professional independence while supported by direct supervision
### Advantages for the students (cont.)

- Exposure to a hospital setting and multidisciplinary teams
- Students are highly competitive for job openings within the VA system
- A wider range of research projects are available for students
- Exposure to computerized medical records

### Disadvantages for the clinic

- Speed of students can slow patient care
- Patient - provider continuity
- Federal regulations/training required before students can step into clinic
- Billing
Disadvantages to students

- Fast-paced clinic can be stressful to inexperienced students
- Experience is limited to adult/geriatric population
- Limited experience with billing and practice management

Challenges - perspectives from other VAMCs

- Retention of knowledge of computer systems is difficult when students are assigned 1 day a week
- Distance between medical center and university limits experiences
- Lack of space for students
- No help from universities with ASHA dues
What are the values and challenges of Clinical Externships?

- Opportunity to give back to the profession.
- Opportunity to provide input for future professionals.
- Opportunity to benefit from current trends in clinical research.
- Opportunity to create contact and continuity with academic training site.
- Evaluate emergent professionals and their contribution to clinical practice.
What are the challenges as perceived by the clinical site?

- No guidance or information about the previous training or experience of externs.
- No opportunity to dialogue with training programs about expectations.
- No interaction with training site.
- Decreased productivity due to the need to supervise and review results with externs.
- Possible problems with client billing and reimbursement.

What strategies would minimize these challenges?

- Create opportunities for interaction with training sites.
  - Consider preceptor training with continuing education credit.
  - Involvement in research efforts for the evidence based practice.
  - Consider university appointment for preceptors.
  - Clinical presentations at the academic site.
The Public Schools

Susan J. Brannen
Monroe 2 BOCES
3599 Big Ridge Road
Spencerport, NY 14559
585 352 2449
sbrannen@monroe2boces.org

Assessing the Value for the student

- Real life implications for the student
- Hearing assistive technologies- full range of options
- Room acoustics
- All pediatric
- Rehabilitation
Assessing the Value for the District

- The possibility of improved services to children, future
- Good possibility of some “free” time for the preceptor to work on other projects
- A new perspective
- Recruitment

Assessing the Challenges for the student

- No financial support available through the district
- Time behind an audiometer, with real ear etc.
- Range of clinical activities
- Itinerant nature of position
- Need for flexibility
Assessing the Challenge for the District

- Initially, supervisory time.
- Administering the needed protocols in a timely manner
- Monitoring the itinerant services, communications etc
- Issue of licensure(s)
Assessing the Value and Challenges of Clinical Externships

Paul R. Kileny, Ph.D., FAAA
ASHA Fellow
University of Michigan Health System

Clinical externships

- Roles and responsibilities of academic program
- Second/third year rotations vs. fourth year externship
- Role of externships
- Responsibilities of host clinical program
- Appropriate interactions between academic and host clinical program
Clinical externships

• Roles and responsibilities of academic program
  – The admission of a student and the establishment of a tuition constitutes a binding contract between the student and the program: the student’s obligation is to pay tuition, the program’s obligation is to train the student. Implicit in this contract is that the program possesses **ALL** of the resources to train the student, **including the 4th year**!

Clinical externships

• Roles and responsibilities of academic program
  – Do programs that do not have the full complement of practicum sites under their control or have set contractual arrangements disclose this information to applicants?
  – If they do not, at what point in the program do they begin to seek placement?
  – What are the criteria (other than willingness and availability) for the selection of a clinical site?
  – Are any efforts made to provide placements representing well-balanced clinical training?
Clinical externships

• Second/third year rotations vs. fourth year externship
  – Earlier rotations consisting of several weeks are easier to arrange and accommodate as they do not require extensive resources from the host clinical facility; the role of these should be to fill in gaps in clinical exposure and experience
  – The fourth year “rotation” is in fact a full academic year during which the students are often trained outside their institution by individuals who are neither faculty members, nor are they compensated for teaching responsibilities. So who is in charge?

Clinical externships

• Role of externships?
  – Fill gaps in clinical training?
  – Serve as an extension to academic program (i.e., true educational partnership)?
  – Provide clinical training during the fourth year because the academic program does not have the resources to do so?
  – Provide real-world work experience?
  – Provide low-cost work force resources to clinical sites?
Clinical externships

• Responsibilities of host clinical program
  – Provide students with a well-organized, structured, state-of-the-art learning experience with measurable, well-documented outcomes
  – Provide students with didactic lectures that may be necessary to fill in knowledge gaps
  – Interact with student’s academic institution in an effort to maximize the learning experience
  – Can we afford to do all this? NO…..

Clinical externships

• Responsibilities of host clinical program
  – Do not use externs as low-cost work force, the primary responsibility is EDUCATION!
  – Is any single clinical placement able to provide a fully well-rounded clinical experience? OCCASIONALLY
  – Would multiple shorter placements be preferable? YES*
  – * i.e., medical school M3-4 clerkships
Clinical externships

• Responsibilities of host clinical program
  – Financial issues
    • The current trend involving the expectation of a salary or stipend to students from host facilities is counterproductive relative to the mission of an externship, and makes no economic sense
    • The trend of compensation-based “competition” between facilities is even more counterproductive: students may select on the basis of the amount of compensation as opposed to content and quality
    • It discourages students to pursue multiple placements based on content, because paid externships typically require a full-year commitment

• Responsibilities of host clinical program
  – We need to recognize that we as a profession have made a commitment to extend audiology education to a four-year doctorate; like in medical school, fourth year students are students who pay tuition to their academic institution. If it is necessary to provide them with externships outside their own institution, why should the host institution have to make a financial commitment?
  – Shouldn’t rather the host institution be compensated by at least sharing in the fourth year tuition, as opposed to teaching on a voluntary basis?
  – If the host institution is compensated, it could be held fully accountable for the content and quality of the teaching provided
Clinical externships

• Appropriate interactions between academic and host clinical program
  – There should be seamless interaction, contractually established with full accountability
  – Willingness to pay students should not be a criterion for considering a site for externship
  – There should be standardization and credentialing of host clinical facilities
  – Students should be formally evaluated and graded by externship site and those grades should account in graduation considerations
  – Personnel from externship sites should have adjunct faculty appointments in the academic program

Clinical externships

• Appropriate interactions between academic and host clinical program
  – Professional liability issues: if the student is allowed to “lay hands” on a patient with or without immediate supervision, and an event triggering a lawsuit occurs, who carries the liability? Is it the host facility, or the student’s academic institution?
Clinical externships

• And finally:
  – The recently developed educational standards stipulate competencies based on knowledge and skills; these standards do not specify that the fourth year has to be spent full-time in one clinical placement.
  – The emphasis should be on the construction of a well-balanced program providing for the fulfillment of those standards and this may require multiple clinical placements during the fourth year.

Clinical externships

• 1. The only legitimate purpose of student externship placements is the provision of well-balanced training that builds knowledge and skills required by the standards that have been set.

• 2. Multiple, balanced, clinical placements in the fourth year where the emphasis is education and training and not income, are more favorable than a single, more likely uni-dimensional placement.
WHY WE **CHOOSE** TO BE A CLINICAL SITE

Or

Are we just a bunch of “wild & crazy guys?”

PROS
OF STUDENTS COMPLETING CLINICAL ROTATION AT COMMUNITY CLINICS
&
VALUE
OF CLINICS PARTICIPATING
**PROS/VALUE**

- Eventually does reduce some of the work load
- Staff can see additional patients & increase productivity
- Staff can participate in other activities
- Allows staff to mentor young professionals & improve their skills as a supervisor
- Students have an opportunity to apply their classroom knowledge in a clinical setting
- Students can see 1st hand the challenges & rewards of being an Audiologist.
- It is our professional responsibility

**CONS**

- Additional staff hours to train students
  - The Clinic protocols
  - Testing procedures
  - Clinical policies
- Loss of billable time - cannot be made up
- Credentials - Must continually convince patients that student can work with them
- Staff do not have time to attend to other tasks
- Can be a poor site due to inadequate supervision or lack of patients
And, according to my staff:

“It is really hard to recover from a BAD one”

DOUBLE that time for a student who is weak and/or maybe should not even be in the program
CON FOR STUDENTS

- Sites take students for the wrong reasons
- Do not provide adequate supervision
- Do not provide patients
- Use students for “busy work”
- Do not share knowledge with student
- Expect students to provide 100% of patient services with no supervision

HOW CAN TAKING STUDENTS BENEFIT THE PROFESSION?

Or

If you can make it here you can make it ANYWHERE!
BENEFITS?

- Ideally, it provides the student with the best possible supervised experience so that they have a valuable clinical rotation and can use this experience in their professional career.
- In a community center, the student will see a wider variety of patients than any other setting.
- Helps students understand skills they need to function in a real world setting.
- Help students understand what patient groups they really want to work with.

WE CHOOSE TO BE A CLINICAL SITE

And we hope that you CHOOSE a community center for your clinical experience!
The Value and Challenges of Clinical Externships

Summary

- 4th year extern sites should provide a well-balanced education that builds knowledge and skills required to meet standard practices.
- 4th year externship model: single site vs. multiple sites
- Placement should be based on diversity of experience & training and not on the offered salary
- Students should be prepared to work as general practitioners and able to work with all ages
Selection of Clinical Sites: The VA Model

Harvey B. Abrams
Bay Pines VA Healthcare System

Disclaimer

- The opinions expressed represent those of the presenter and do not necessarily reflect those of the Veterans Health Administration or the Department of Veterans Affairs

(or Ian Windmill, for that matter)
VA Education & Training

- The Department of Veterans Affairs (VA) through the Office of Academic Affiliations conducts an education and training program for medical students, associated health students, residents, and fellows to enhance the quality of care provided to our veteran patients at Veterans Health Administration (VHA) medical facilities.

VA Teaching Mission

- VA’s teaching mission contributes to high quality health care of veterans in the following ways:
  - By creating a climate of clinical inquiry between trainees and teachers.
  - By enhancing quality of care through the application of medical advances.
  - Through the provision of excellent clinical care by supervised trainees.
  - Through the recruitment of highly qualified health care professionals into the VA healthcare system.
Office of Academic Affiliations

Education of Physicians

- 130 VHA medical facilities are affiliated with 107 of the nation's 126 medical schools.
- 28,000 medical residents and 16,000 medical students receive some of their training in VA every year.

Office of Academic Affiliations

Education of Associated Health Professionals

- Clinical traineeships and fellowships are provided to students in more than 40 professions, including nurses, pharmacists, dentists, audiologists, dietitians, social workers, psychologists, physical therapists, optometrists, podiatrists, physician assistants, respiratory therapists, and nurse practitioners.
- Over 32,000 associated health students receive training in VA facilities each year, and provide a valuable recruitment source for new employees.
ASPS Traineeship Program

- The Audiology and Speech Pathology Service has funded and unfunded (Without Compensation – WOC) traineeship programs for both masters and doctoral degree candidates, supported by the Office of Academic Affairs.
- University graduate school affiliations are maintained under established agreements for all students throughout the VA system.

Types of ASPS Traineeships

- Non-stipend clinical rotations
- Stipend 2nd & 3rd year clinical rotations
  - $3,500 (350 hours)
- 3-year ASPS predoctoral fellowships
  - $9,500 for 1st 2 years (20 hours/week)
  - $19,000 for 3rd year (40 hours/week)
Types of ASPS Traineeships

- Geriatric Research, Education and Clinical Centers (GRECC)
  - $3,500 (350 hours)
- 1-year Rehabilitation Research predoctoral fellowship
  - $25,000 (40 hours/week)
- 4th year Au.D. externship
  - $33,000 per annum

Standards of Excellence
The VA Philosophy

- VA facilities need to demonstrate excellence in their training programs when competing for limited trainee funds
- Standards of excellence in profession-specific clinical education and training including interprofessional education are designed to enhance the movement toward the ideals of excellence in education, training and practice in the VA health care system
Standards of Excellence
The VA Philosophy

Toward this end, generic standards of excellence in clinical and inter-professional education and training have been established.

Generic Standards of Excellence

VA clinical education and training programs should meet or exceed elements or standards mandated for approval by an accrediting agency and adhere to VA's goal of providing patient-focused inter-professional education and training.
Generic Standards of Excellence

- The educational infrastructure (e.g. facility, staff and material resources, clinical education coordinator, etc.) at local facilities and Veterans Integrated Services Networks supports excellence in clinical education and training.

- Training programs contribute to patient-focused care that reflect:
  - VA’s health care priorities (primary care, geriatrics, mental health, rehabilitation)
  - Special emphasis programs (spinal cord injury or dysfunction, addictive disorders, geriatrics and long-term care, homelessness, post-traumatic stress disorders, women’s health, Persian Gulf syndrome, polytrauma and traumatic brain injury, blind rehabilitation and low vision)
Generic Standards of Excellence

- If clinical education and training programs at the facility are affiliated with academic programs, the relationship should be enhanced through:
  - academic faculty appointments
  - membership in school or university academic committees
  - joint ventures in developing and conducting continuing education programs
  - research and other scholarly activities

Generic Standards of Excellence

- Inter-professional education addresses knowledge, skills, and attitudes appropriate for successful collaboration and teamwork in clinical settings.
- Results of evaluations are used to plan and implement program improvements that promote high quality educational experiences for trainees.
Audiology-Specific Standards of Excellence

- Staffing (including clerical and support staff)
- Clinic profile, workload, and case mix
- Facilities and equipment
- Research
- Outcome measures

Involvement in nursing care units, primary care, pediatrics, neurology, rehabilitation, ICU, surgery

Academic partnership (evaluations, policy and procedures, faculty appointments, curriculum, continuing education)
The Application Process

- Program Announcement
  - Funding is for Academic Year following announcement (e.g. October 2005 announcement for 2006-2007 AY funding)
- Sites complete Excel spreadsheets which are uploaded, compiled, and scored
- Completed applications due in 30 days
- Funding decisions made in 60 days

The Review Process

- Sites are scored against the Standards of Excellence and are rank-ordered by total score
- Percentile scores are also calculated
- Scores are used in making recommendations for allocation
The Review Process

- Subjective factors are sometimes applied for:
  - small but excellent sites
  - sites located in facilities with key emphasis areas such as blind rehab or polytrauma
  - sites with strong academic partners
  - historically under-represented areas

The Scoring Process

- Staffing - 20 points
- Clinic Profile - 30 points
- Clinic facilities - 20 points
- Complementary (outcome measurements and research) - 15 points
- Miscellaneous (medical center involvement and academic partnership) - 15 points
### Traineeship/CFY Application

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Audiology Education Summit II Report
November 2006
Page 160
Extern Selection

- OAA and National ASPS office publish list of sites awarded 4th year externships
- Currently no VA-wide system for matching students with facilities
- Method by which sites select students vary throughout VA

Implications for Non-VA Clinical Sites

- In the absence of national standards university training programs can establish objective criteria for evaluating externship sites
Implications for Non-VA Clinical Sites

- As a minimum, evaluation criteria should consider:
  - Staffing
  - Workload
  - Facilities (equipment, space, resources for students)
  - Affiliations
  - Research
  - Student policies & procedures

But What About Matching?

- VA ASPS has begun preliminary planning
  - We know how many funded positions we have
  - Funded positions are announced 6 months prior to academic year
  - We know where the funded positions are located
  - We have a website where information/applications can be accessed
  - What we need is a centralized mechanism to match applicant with site
But What About Matching Outside VA?

- A nationwide matching program is under development
  - Check out the round table session on the national matching initiative

Conclusions

- VA has established an objective, merit review process for identifying quality training sites based on a set of standards of excellence
- Evidence of a meaningful partnership between the university and VA facility will take on increasing importance
Conclusions

- The VA model has implications for non-VA institutions
- An opportunity exists for matching extern candidates with specific VA training programs which may also serve as a national model

Websites

- Office of Academic Affiliations
  - [http://vaww.va.gov/oaa/default.asp](http://vaww.va.gov/oaa/default.asp)
- National Audiology & Speech Pathology Service
- National Matching Service
Student Preparation Before Clinical Placements

Sharon A. Lesner

Sharon A. Lesner, Ph.D.

The University of Akron
The Northeast Ohio Au.D.
Consortium (NOAC)

The Northeast Ohio Au.D.
Consortium
Education Summit II

Student Preparation Before Clinical Placements

Goals of Presentation

What are the essential characteristics of.....
1. ways to sequence course work and clinical experiences?
2. effective methods of measuring student readiness for clinical placements?
3. effective communication regarding student readiness among the academic program, students, and clinical sites?
Method

Questions
Assumptions
Considerations
Options

What are the essential characteristics of..... ways to sequence course work and clinical experiences?
Certification Standards

• “Time spent in clinical practicum experiences should occur throughout the graduate program”
• “Students shall participate in practicum only after they have had sufficient preparation to qualify for such experience”

Certification Standard

• “Students must obtain a variety of clinical practicum experiences in different work settings and with different populations so that the applicant can demonstrate skills across the scope of practice of audiology.”
Certification Standard

“ The program must provide evidence of appropriate sequencing of course work and clinical practicum. Typically, information in basic sciences and normal processes precedes information in disorders, and information in disorders precedes clinical application.”

Summit I: Essentials

The clinical experience should promote a progression of student skills and didactic instruction that lead to independence.

Clinical teaching should reflect this progression and be commensurate with the clinical skills of the student.
Summit I: Essentials

- Clinical education should occur throughout the program
- Experiences should promote a progression of skills
- Experiences should be diverse
- Students should begin in their first semester with experiences commensurate with their background and knowledge

What are the differences between..

- Teacher
- Preceptor
- Mentor
Teacher

- Focus = discipline based teaching
- Centered on content with personal aspects secondary
- Teacher/student

Preceptor

- From the Latin word *praecipere* = to teach
- Focus = Patient-centered teaching
- Preceptor/apprentice
Mentor

- Focus = personal development
- One-to-one relationship that is sustained
- Mentor/protégé

Doctor

- From the Latin *docere* = to teach
What constitutes clinical teaching?

- Old versus new standards

What constitutes clinical teaching?

- Labs
- Grand rounds
- Case studies
- Observation
- Assisting
- Direct patient care
- Record keeping/etc

- Journal clubs
- Simulated patients
- Simulators
- ?????
Ear Exam Simulator

www.kyotokagaku.com

- 10 normal
- 10 abnormal middle ear findings

When should clinic activities start?

- Only 3 out of 17 schools of optometry offer clinical experiences in 1st year (Maier, Smith, Coffey, 2005)
What models of clinical education are available?
Models of Clinical Teaching

Goodfellow and Scharre (2003)

Direct Patient Care with Single Observer

Student  ---  Preceptor  ---  Patient
Direct Care Model with Student Participation

Preceptor Model with Single Student Care
**Preceptor Model with Single Student Care and Observation**

![Diagram of preceptor model with single student care and observation]

**Preceptor Model with Multiple Student Care**

![Diagram of preceptor model with multiple student care]
Preceptor Model with Multiple Single Student Care

Preceptor

Student - 1
Patient - 1

Student - 2
Patient - 2

Student - x
Patient - x
Where should clinical experiences be obtained?

- In-house
- Out-house

What are the essential characteristics of.....

Effective methods of measuring student readiness for clinical placements?
Certification Standard

*"The program conducts ongoing and systematic formative and summative assessment of the performance of its current students."

- Variety of assessment techniques
- Administered by a variety of individuals
- Feedback is provided

Certification Standard

*"Applicants may also be part of the process through self-assessment"
Summit I: Essentials

- Student skill development should be monitored regularly
- Feedback should be provided to promote clinical skills on a regular basis.
- Clinical skill expectations should be explicit at every clinical training phase.

Grading vs. Assessment vs. Evaluation
Evaluation

• A judgment of how well a student meets the “values” of the school or profession
• Qualitative

Pangaro (2005)

Grading

• Involves assigning a label or rank to the level of performance
• Quantitative

Pangaro (2005)
Assessment

- Includes the entire process of evaluation and grading

Pangaro (2005)

What are the purposes of assessment?

- Formative versus Summative
Formative

- Purpose is to “form” or shape the subsequent performance of the student
- Narrative description
- Feedback is important
- Done during an experience

Pangaro (2005)

Summative

- Done at the end of experience
- “Sums” up the student’s performance
- Usually includes a grade and narrative

Pangaro (2005)
How should students be assessed?

- By whom
- How
- When

Who should assess students?

- Self-assessments
- Preceptor
- Faculty
- Peer
- Patient/family
What types of assessments?

- Self-assessments
- Knowledge-based examinations
- Practical exams
- Comprehensive examinations
  (Summative)
- ????

Considerations in Choice of Evaluation Method

- Time requirements
- Which faculty members will participate
- Scheduling
- Use of clinical equipment
- How to grade
- What to grade
- Frequency of grading
What should be assessed clinically?

**NOAC Formative Assessment**

- 7 General Competency Areas
  - Preparation
  - Interpersonal Communication
  - Diagnostic Skills, Group 1
  - Diagnostic Skills, Group 2
  - Audiolologic Treatment Skills
  - Interpretation and Report Writing
  - Professionalism
NOAC Summative Assessment

6 General Areas
- Patient Care
- Applied Audiology knowledge
- Practice-based Learning and Improvement
- Interpersonal & Communication Skills
- Professionalism
- System-based Practice

How should students be graded?

- Dichotomous versus scalar grading
- Compensatory versus “Weakest-Link”
- Descriptive versus Quantitative
- Developmental Approaches

Pangaro (2005)
NOAC Clinic Grading

- 7 point Likert Scale
- Average score for each area
- Overall average
- Comments section
- B- or lower in any area requires remediation and no grade is issued

When should students be assessed?
What about national exams?

When should they be taken?
Who should assign grades?

According to *College Law Digest*:
- Educational institution “owns” the student
- Clinical site “owns” the patients

What can be done about grade inflation?

- It exists!
- 1960’s to 1970’s – A’s have doubled, C grades have been reduced by ½
  - (Weller, 1984)
- Internal medicine: 43% “unable to appropriately identify incompetent students based on grades”
  - (Speer, Solomon, & Fincer 2000)
How should feedback be provided?

- Importance
- Need for timely and constructive feedback

What should be done with problem students?

- Types of problems typically identified
  - Academic
  - Non-academic
How should problem students be handled?

- Remediation plans
- Technical standards
- ADA considerations
- Legal issues

What are the essential characteristics of effective communication regarding student readiness among the academic program, students, and clinical sites?
Standards

“Clinical education obtained in external placements is governed by agreements between the program and the external facility and is monitored by program faculty.”

Summit 1: Essentials

An individual dedicated to communication with clinical sites should maintain contact with off-site preceptors.

A formalized skill assessment tool and method of assigning grades should be in place.

A formalized assessment system should be used to evaluate both students and site.
Summit 1: Essentials

- There is clear, frequent, and documented communication between the university and clinical sites.
- There is clear, frequent, and documented communication between the university and students.

What information is needed by the clinical site about potential students?

- Knowledge
- Clinical skills
- Personality
- Recommendations
- Grades
- Portfolios
- Interviews
What information is needed by the clinical site about potential students?

- Proof of liability insurance
- HIPAA certification
- Immunization status
- Criminal background check
- ???

What about the problem of bias?

- Family Educational Rights and Privacy Act (FERPA)
- ADA
What are the expectations of the university concerning student assessment at the clinical site?

- What types of assessments?
- When should they be done?
- What should be done with the results?

What information about preceptoring is helpful and/or needed by the external site?

- Methods of preceptoring
- Instruments for student assessment
- Syllabi that include expected outcomes
- Information about how to set expectations and goals
Methods of Preceptor Development

- Preceptor handbooks
- Preceptor calendars
- Web sites
  - Home Pages
  - One Minute Preceptor
  - Alliance for Clinical Education (ACE)
- Discussion boards
- Chat rooms
- Readings
- Workshops
- Focus groups
- Newsletters
- Visits/Phone calls/Email

What are the benefits of partnerships?

- Realistic expectations
- Input flows both ways
- Known personalities
- Reduced competition and improved efficiency
What are the benefits of partnerships?

- Resource sharing rather than competition
- Greater investment in the process

Enhanced Collaboration
Student Evaluation During Clinical Placements

Sharon A. Sandridge, Ph.D.
Cleveland Clinic
Northeast Ohio Au.D. Consortium

Masters with Clinical Fellowship Year

Au.D. with Fourth-Year Extern

What are the challenges/opportunities in the new model?
Collaborative Clinical Education

Student

University

Clinical Sites

Clinical Education

Collaborative Clinical Education

- Teaches students to be self-directed, lifelong learners by:
  - taking initiative to identify their learning needs
  - choosing and using available resources
  - practicing new skills
  - seeking feedback on their performance from peers
Collaborative Clinical Education

- Places more responsibility on the preceptor
- Preceptors responsible for 25% or more of student’s education

Are your preceptors ready for this responsibility?
How can you make them ready?

Preceptorship

- Model of teaching that pairs students with experienced practitioners
  - professional socialization
  - enhances learning
  - promotes critical thinking
  - cultivates practical wisdom
  - facilitates competence

- Perfect medium in which practice and education combine to achieve goal of preparing future clinicians
Authentic connection leads to:

- Communication
- Clarity of Expectations
- Focus on S/W
- Sharing of ideas
- Clinical Education
- Regular interaction
- University
- Patient Care
- Student
- Preceptor

Being a Preceptor

- Not primary responsibility
- Time-consuming
- Education preparation
- Clinical teaching skills
- Support from administration
- Support from colleagues
Roles of Preceptor

- Role Model
- Teacher
- Facilitator
- Guide
- Evaluator

Primary Charge for session:

- Evaluation of students on-site during clinical placements to produce the desired outcome at the desired level of independence
Second Charge:

Communication Among the Stakeholders

- University
  - Faculty
  - Administration
- Clinical Sites
  - Preceptors
  - Administration

Students

Patients

Third Charge:

Dealing with ‘difficult’ students
Evaluation

What are some issues in the evaluation process?

Evaluation

☐ When do you evaluate?
☐ When does it begin and end?
☐ Begins before the rotation starts and continues throughout the entire clinical experience
Evaluation

- *Evaluation is not just a grade.. But a process for guiding and contributing to the growth and development of our future colleagues...*

Evaluation Process

- Ongoing
- Forms foundation for the information you share in evaluation session
- Fully integrated into the entire rotation
- Components
  - Setting expectations/goals
  - Ongoing observations
  - Behavior-specific feedback
Evaluation Session

- Scheduled, formal session between preceptor and student
- Small part of the entire picture
- Takes only small portion of time relative to length of learning experience – but requires significant amount of background to be valid and effective

Why is evaluation important?

- Basic expectation by all
- Critical function as role of ‘teacher’
- Can enhance quality of learning experience – educational value of rotation
Assessment tools

- Narrative summaries
- Self-assessment
- Peer assessment
- Patient/family assessment
- ???

Universal Tool Clearinghouse

Information sources

- Carefully listening
- Observation of clinical performance
- Review of written activities
- Inquiries of patients, families, staff
- Asking questions
Use of questions

- Allows preceptor to determine
  - learning needs
  - stimulate thinking
  - transfer responsibility to the student
  - model essential professional behavior
- Need to know what types of questions to ask and how to ask questions effectively

Types of questions

**Lower-level**
- Recall of facts, concepts, principles

**Higher-level**
- Analyze, synthesize or evaluate information

**Affective**
- Assesses attitudes and feelings
Types of questions

Closed (convergent)
- Narrow in scope, one correct answer
- May be used to prompt to
  - Recall facts
  - Prioritize
  - Converge information
  - Challenge their ideas

Open (divergent)
- Range of possible answers, invite reflection/speculation and stimulate problem solving
- Requires higher-level cognitive performance
- More freedom to respond
- Gets at student’s thinking process and level of expertise
Hierarchy of questions

- What is your interpretation of the results? (diagnosis)
- What interventions do you suggest? (decision)
- What would you do if this patient was 5 years old rather than 65? (hypothesize)
- What leads you to that conclusion? (challenge)
- What are the important issues that emerged today? (summarize)

What does this do?

- You understand the stiffness/mass curve don’t you?
- Wouldn’t you agree that the masking is wrong?
Asking questions effectively

- Wait 3 seconds
  - After asking question
  - After student stops speaking
- Allows student time to formulate response
  - Increases length of responses
  - Increases student participation
  - More elaborate and better-supported responses (Westberg & Jason, 1993)

Asking questions effectively

- Ask one question at a time
- Maintain noncommittal stance
Evaluate performance based on predetermined goals/objectives.

Learning Contract

- Outlines expectations for rotation
- Student outlines goals for rotation
  - Area of discussion and modification
  - Can’t say “You never told me that!”
- Copies to student and student file
- Basis for feedback and evaluation process
Levels of Evaluations

- Regular Feedback
- Formative Assessments
- Summative Assessment

Feedback

... is an essential component of effective human learning
Thorndike (1912)

- 3 groups of students asked to draw straight lines

<table>
<thead>
<tr>
<th>Group</th>
<th>Feedback</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>No feedback</td>
<td>No Improvement</td>
</tr>
<tr>
<td>Group 2</td>
<td>Minimal feedback</td>
<td>Steady improvement Never reached 100%</td>
</tr>
<tr>
<td>Group 3</td>
<td>Complete feedback</td>
<td>Rapid improvement 100% accuracy</td>
</tr>
</tbody>
</table>

Feedback

An informed, nonevaluative, objective appraisal of performance intended to improve clinical skills
Feedback

*Not* an estimate of student’s personal worth

Feedback

Must be closely tied to predetermined expectations/goals/objectives
Feedback

- Key step in acquisition of clinical skills
- Occurs when a student is offered insight into actions and consequences of those actions
- Provides impetus for change
- Provided daily

Without feedback

- Mistakes go uncorrected
- Good performance does not get reinforced
- Clinical competence is achieved empirically or not at all
Without feedback

- Students can only gauge performance by trial and error
- Not given in timely fashion – no time to improve

Understand that ...

- Students do not perform required skills incorrectly on purpose – certainly not when being observed by preceptor
- Errors in performance typically result from insufficient feedback - seldom from insufficient student interest or caring
Take home message!

Students who receive feedback do better than students who receive inadequate or no feedback!

Feedback helps students achieve their learning goals

Want students to be capable of:

- Establishing own goals
- Critiquing own performance
- Identifying own strengths/ weaknesses

Develop these skills to be life-long learners
Yet, do we routinely provide feedback?

Barriers to giving feedback

- Assume they know how they are doing
- Lack of time
- Personal comfortable level
- Unsure if it is an anomaly or habit
Guidelines for feedback

- Focus on behavior and performance
- Focus on specifics not generalizations
- Based on first-hand data
- Prioritize points for feedback
- Deliver in positive manner
- Phrase in descriptive, nonevaluative language
- Use *Feedback Sandwich*
- Collaborate on remedial plans
- Students and reflective listening

Rider, 1995
Guidelines for feedback

- Focus on behavior and performance
- Focus on specifics not generalizations
- Based on first-hand data
- Prioritize points for feedback
- Deliver in positive manner
- Phrase in descriptive, nonevaluative language
- Use Feedback Sandwich
- Collaborate on remedial plans
- Students and reflective listening

Rider, 1995

Example: Self-Assess

- How do you think things went?
- What part of the hearing aid counseling did you feel you did well?
- What part of do you think you need to improve?
Example: Positive action

Your ease of moving through the programming software illustrates that you took time to become familiar with the fitting software.

Example: Improvement

☐ Next time you review the use and care of the hearing device – what would you do differently?
Example: ??

- Your differential diagnoses are inadequate – a first-year student would know this!

Challenges in giving feedback

- Identify why students did not incorporate feedback
  - Didn’t recognize it as feedback?
    - Label It!
  - Didn’t understand feedback?
    - Reflective listening!
Receiving feedback

☐ Opportunity to learn and grow
☐ Opportunity to gain confidence in strengths
☐ Be active rather than passive
☐ Request specifics not generalizations
☐ Formulate learning goals

Rider, 1995

Levels of Evaluations

Summative Assessment

Formative Assessments

Regular Feedback
Feedback versus Evaluation

<table>
<thead>
<tr>
<th>Feedback</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timing</td>
<td>Daily or more</td>
</tr>
<tr>
<td>Setting</td>
<td>Informal</td>
</tr>
<tr>
<td>Basis</td>
<td>Observation</td>
</tr>
<tr>
<td>Content</td>
<td>Objective</td>
</tr>
<tr>
<td>Scope</td>
<td>Specific Action</td>
</tr>
<tr>
<td>Purpose</td>
<td>Improvement</td>
</tr>
</tbody>
</table>

Formative Evaluation

- Helps students
  - Evaluate own knowledge/understanding
  - Identify strengths/weaknesses without penalties
  - Understand preceptor’s expectation
  - Make continual adjustments to improve
Formative Evaluation

- Helps preceptors
  - Evaluate and modify teaching to maximize student progress
  - Recognize student’s progress and achievements

Levels of Evaluations

- Regular Feedback
- Formative Assessments
- Summative Assessment
Summative Evaluation

- Done at the end of experience
- “Sums” up the student’s performance
- Usually includes a grade and narrative

Can things go wrong in the evaluation process?
Halo Effect

- Influence of one characteristic on another
  - She has a great personality so you overlook her mediocre skills
  - Need to look beyond personality traits – consider entire package of underlying knowledge, attitudes, skills, and performance

Memory Lapse

- Not able to recall details or specifics
- Creates challenges in justifying your evaluation
- Need system for recording specific problems or excellence.
You never told me that!

- Don’t assume student knows what you want
- Must establish goals/objectives for rotation on Day 1
  - Readings, lab work, skill levels, level of independence
- No surprises at final evaluation session

Grade expectation/inflation

- Final day of rotation is not time to become aware of problems and less-than-outstanding performance
- Establish goals/objectives at onset of rotation
- REMEMBER Internal Medicine findings
Lake Wobegon

☐ All students essentially equal
  ■ Fails to reward the outstanding students
  ■ Fails to identify weaker students so that they can get help

GRAD

G – Get Ready
R – Review Expectations with Student
A – Assess
D – Discuss Assessment at Mid-Point
E – End with a “Grade”
TIME

- Feedback takes about 10 minutes per day
- Keep notebook in pocket to document
- Work together with academic program on the evaluation form.

Paperwork

- Become familiar with evaluation forms early on
- Contact university if concerns or confusion arise
- Complete and return forms promptly
Third Charge:

Dealing with ‘difficult’ students

Best method is prevention!
### Prevention of problems

- Process begins at selection/admissions processes and ends upon graduation
- Well-designed curriculum
- Vigilance and targeted feedback – especially in early stages of education
- Clinical rotation design

### Clinical Rotation

<table>
<thead>
<tr>
<th><strong>University</strong></th>
<th><strong>Clinical Site</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Match students skills with clinical site</td>
<td>Conduct orientation</td>
</tr>
<tr>
<td>Match students personality with clinical site</td>
<td>Establish expectations/goals</td>
</tr>
<tr>
<td>Clinical site offers positive, nurturing atmosphere</td>
<td>Review rules</td>
</tr>
<tr>
<td></td>
<td>Provide regular feedback</td>
</tr>
<tr>
<td></td>
<td>Conduct formal, mid-rotation feedback session</td>
</tr>
</tbody>
</table>
Orientation – MUST DO!

Systematic Orientation

- Answers basic questions so student can focus on clinical rotation
- Student learns about clinical practice
- Saves preceptor time and energy for the rest of rotation
- Prevents mistakes “I didn’t know that!”
- Framework for giving students feedback and evaluating them
Introduction to Practice

- Work space, personal space, parking
- **Dress code**
- Work day
- Mail, telephone
- Staff and their responsibilities
- Time off (vacation, sick, holidays)

Establishing goals/objectives

- Course Syllabus
- Known competencies of student
- Known skill level needed for this rotation

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November 2006
Page 239
Why don’t we identify problems?

- Staff inexperience/untrained
- Exposure may be episodic, superficial, & lack the depth to identify problems
- Concern about appearing judgmental toward students
- Unwilling to record negative comments
- Avoids inconvenience & awkwardness
Can these be remediated?

- Shy?
- Laziness?
- Lack of knowledge/skill level

Feedback and interventions focus on activities that are changeable rather than personality characteristics that are not.
Primary prevention

- Know academic program’s expectation for clinical rotation
- Clear understanding of expectations and goals of clinic, preceptor, student, academic program
- Mid-rotation evaluation

Secondary prevention

- Early identification of potential problems
- Notification of academic program as soon as a problem is seen - a heads up!
- Hints of problematic behavior often communicated vaguely by staff member, patient or family member or fellow student
Tertiary prevention

☐ Get help – don’t use this as a last resort
☐ Contact academic program
☐ Don’t be a martyr
☐ Give grade that is earned!
  ■ This accurately reflects student’s performance and abilities

“"It is really hard to recover from a BAD one”

Gay Ratcliff, 2/3/06
Methods to address problems

- Personal one-to-one assessment of knowledge and skills
- Clinical case discussions
- Additional readings, exercises, assignments
- Outside professionals

Involve the student

Other issues

- Who is involved in intervention? Academic program, clinical site
- Time frame for intervention/remediation
- Issues to be documented
- Evaluation of intervention
- Who should know .. Legal/liability issues
Document

☐ Student performing unsatisfactory should receive feedback including recommendations for improvement

☐ Document meetings, interventions, outcomes

☐ Consequences of failure to progress

Intervention after problem emerges

S - Subjective: use experience & opinion to gain individualized impression of difficulty

O - Objective: document specific examples

A - Assessment: diagnose problem

P - Plan: develop & implement remedial plan
What would you do?

☐ A member of your office staff has expressed some minor concerns regarding student. At this point you should do?

1. Ignore their comments
2. Document and discuss at mid-rotation evaluation
3. Tell student there has been a complaint and don’t let it happen again
4. Carefully observe student to determine if this is a significant issue
The 4th year extern is NOT the clinical fellowship year.

It is a model of collaborative education.

Partnership model

Clinical Sites

Student

Clinical Education

University
Facilitator Closing Remarks

Paul L. Gaston

Summit Summary & Wrap-Up

An Impressionistic View

Monet, Not Manet

• Your facilitator’s summary NOT a substantive, point-by-point record of accomplishments. (That will be provided through a report from your Advisory Committee.)

• Rather, a *disinterested*, subjective, impressionistic perspective on three remarkable days.
Consider the Objectives

1. Identify the core areas and depth of independence of clinical knowledge and skills that are essential upon completion of the clinical doctoral program in audiology. *Emerging consensus stronger, more detailed.*

2. Summarize quality indicators of the sequencing of academic and clinical preparation for placement of students throughout the duration of the program. *Multiple indicators identified, discussed, ranked.*
Consider the Objectives


4. Describe the challenges of clinical externships (e.g., financial support, credentialing, matching programs, quality indicators of preceptors and sites) and evaluate models presented to address these challenges. *Far broader awareness of challenges—and of approaches to addressing them. A “Declaration of Interdependence”?*

Virtues Demonstrated

- Professionalism
- Persistence
- Stamina
- Integrity
- Civility
- Cordiality
- Generosity ($2) to the restroom piano player
Connections Acknowledged

• Throughout the summit, participants were alert to alignments, correspondences, and affinities, e.g.
  – Communication critical at every level: university to practice, practice to student, university to student, etc.
  – Maintaining the balance: continue the effort to reach consensus on important issues while recognizing the value in differentiation

Values Enacted

• Strong commitment to audiology
• Commitment to success of doctoral evolution
• Deep engagement with the education of audiology’s next generation
• Broad understanding of issues
• Willingness to approach consensus on many issues
• Insistence that “elephant” be acknowledged and addressed in appropriate forum
• Acceptance that consensus may be slow to emerge on some issues
Strategies

• Considering carefully the issues at hand and speaking thoughtfully and directly to them
• Assisting others in group discussion by attentiveness, questions, energy
• Supporting the small group facilitators
• Contributing to the summaries

Differences

• Perspectives on credentialing
• Pace of progress towards consensus
• Extent to which consensus must create uniformity
• Next steps
Measures of Success
From the Facilitator’s Perspective

• Have participants contributed to discussions advancing the profession? Nearly everyone has contributed, energetically and substantively.

• Are there “take-aways” participants should find useful at home? Each topic has generated perspectives that invite consideration and possible implementation.

• Are areas of disagreement understood and accepted? Understood and accepted, to a degree. Resolved, no.

• Have participants learned from one another? Conspicuously.

But reaching one summit . . . .
often reveals a next, higher ascent

I rose, and then perceiv'd
I was deceiv'd:
My hill was further . . . .

--George Herbert
Climb on!

Thank you!
APPENDIX F: Open Mic Discussion Summary

Facilitator Paul Gaston initiated the Open Mic session by presenting the following “ground rules.”

- The session is an informal “hearing,” not a business meeting: no motions, no debates.
- All remarks, observations, and expressions of concern should be brief.
- All remarks, observations, and expressions of concern will be recorded, for two primary purposes:
  - To assist the advisory committee in evaluating this summit.
  - To suggest issues for the agenda of any meeting(s) in the future.

The following information is presented as direct commentary from a number of the participants during this session. An audio recording was not made of the session, but the comments reflect participant remarks as close to verbatim as possible from the notes taken by multiple recorders during the session.

**Topic**: Focus more on student outcomes for future meetings and less on process.

- Focus of this conference has been on process instead of outcomes. It would be better if the focus was more on student outcomes, especially at the end of the sequence of courses. Encourage future conferences focus on outcomes.

**Topic**: Examine alternatives to 4th year externship

- Many of us are frustrated with the 4th year externship; it was based on other models – optometry, residency – and it seems that it is ending up being not that different from the CF. Is there a more creative way to arrive at a student who has met the outcomes, and not have the 4th year? Is there a better way of doing this? The 4th year does not appear to be working in a lot of circumstances. Let’s think outside the box and come up with an alternative way to produce a competent audiologist that may not include a 4th year externship/full-time 12 month externship as it has caused problems for universities, preceptors, etc. Do we have to do it this way – is there a better way – are we locked into it?

**Topic**: Request for clarification – student declaration of credentialing goals at beginning of program related to requirement of CCC of all supervisors/preceptors

- During the discussion of qualifications of preceptors and sites, I was told the new CAA accreditation standards document will have CCC as an option for students and not a requirement for the program and for preceptors. That is, when a student comes into the program, will the student have the option to declare whether or not he/she wants to seek certification? If the student chooses not to, then is it true that they do not have to have a preceptor with CCC throughout the training program? If they do opt to get certification, then they would need 1820 hours (12 month FTE over a 4 year period) supervised by a CCC preceptor. University would no longer need sites with CCC preceptors. Is this accurate??
This is a critical element – if this is a fact that it is in the new standards, it needs to be clarified by the CAA. Online the mission no longer states this, although this is a change, the gray area is the intent that graduates meet certification standards, but it is not a mandate.

Response:

- A member of CAA and ASHAs’ Vice President for Academic Affairs responded that the CAA standards were in peer review through end of November 2005 and have not been approved yet. The proposed standards do indicate that students could have the option to declare their desire to pursue clinical certification or not. This issue has not been voted upon yet. It is just a proposal in front of CAA at this time and there are extensive comments regarding the option in question. There will be discussion of this and other issues at the March 2006 CAA meeting. Each member has all the peer comments from the standards review, but she cannot speak to any specific comments of any particular standard at this time. There are accreditation standards for programs and certification standards for individuals that must be differentiated.

**Topic:** Request for clarification – are programs expected to prepare students to meet certification standards? If this change is agreed upon in the new accreditation standards, will there also be changes in the CCC standards related to that?

Response:

- Whatever the decision is on that point will likely affect the rest of the document. There will be very careful review of the accreditation standards.

Response:

- The current chair of CFCC had the following response (see Appendix F-1 for more detailed response)
  - Applying for certification is optional. If individuals seek certification, then they must be supervised by audiologist who holds CCC.
  - CFCC is currently looking at supervisors who are not audiologists (e.g., ENTs) and are open to looking at preceptors without CCC – issue is on the table.
  - The main issue is determining the minimal characteristics of supervisors/preceptors that are needed to meet the standards. There may be some overlap for personnel.
  - Students can have more than the 1820 hours as part of their AuD program supervised by someone with the CCC.

Commenter:

- Why doesn’t certification board just accept certification applicants if graduating from accredited programs as having completed needed education? Both programs are associated with the same organization, but groups are requiring additional requirements.
Response:

- The issue is that some want the CCC ultimately even if not required. If person is seeking CCC, you want to make sure they have been supervised by someone with the appropriate credentials.

**Topic:** What does the CCC have to do with the qualifications of a supervisor/preceptor?

- My company employs 150 audiologists, many of whom have dropped their CCC. Does this make them now less qualified to be preceptors because they no longer have their CCC? Do audiologists no longer see the CCC to qualify them to be competent? The title becomes meaningless. Not keeping CCC does not make us less qualified as a supervisor. This is a confusing issue for students; they don’t know if they will need the CCC later, how can they make this decision?
- The question that needs to be resolved is: What does the CCC have to do with the qualifications of a supervisor?

**Topic:** Request for clarification – risk of accreditation if program graduates students that do not meet certification standards

- When she asked the CAA whether programs can graduate students who don’t meet the CCC requirements and still be accredited, she was told yes, as long as the students have the “option” of meeting the requirements.
- It is unclear whether programs who are graduating students who don’t meet the CCC requirements are jeopardizing their accreditation. We need more clarification on this issue. He indicated that he was in possession of a letter from CAA indicating the opposite, i.e. his program must graduate students who meet the CCC requirements.

Commenter:

- This is not the appropriate forum for these kinds of issues – such statements are counterproductive at this meeting.

**Topic:** If students are given options for credentials, what clear, unbiased information will be provided to them?

- Students are concerned that if they are given an option to get or not get CCC – will they be advised appropriately without bias? Students are at a disadvantage because they do not know the history and would be relying on advice from their advisors and professors at the beginning of their programs. Request for clarification on this issue and share results with students.
**Topic:** How does practicum class time count toward minimum curriculum hours?

- What is the status of the 4 year versus 3 year programs?
- In the Department of Education testimony, it indicates that the 2007 standards state the need for 75 semester hours. Are these didactic hours or do these include clinical hours?
- When students take their practicum course, does the time students spend in the class discussing cases count toward didactic hours?

**Topic:** Use of standard examinations in student preparation

- For 4-year doctoral programs, there is a move on to develop meaningful examinations at interim stages and insure public that graduates of accredited programs are qualified.

**Topic:** Appropriateness of the CCCs

- This is the forum to make issues and discussion public and not keep them under the table.
- The CCC is outdated, and adding continuing education as a requirement for the CCC is too little, too late. We should drop the CCCs as a requirement for supervision and go to Board certification.

**Topic:** Initial discussions related to two accrediting bodies

- CAPCSD raised an important issue regarding having two accrediting bodies for the field regarding program accreditation. Will programs have to choose between them or will they have to be accredited by both? CAPCSD has brought ACAE, CAA, ASHA, and AAA together to discuss this issue. Some proposals have been made and they are in their first iteration. The group is trying to address this issue directly.

**Topic:** Status/accessibility of materials from Summit I

- What happened with the information from Summit I – thought there was a consensus that the CCC was not necessary.

**Topic:** When/how will answers be provided to the questions posed by participants during Open Mic session?

- How do we get the answers to these questions?
- Consideration should be given to what the source is for getting definitive answers to the questions being asked today.

**Topic:** Has the Praxis examination been revamped /rewritten to reflect the doctoral level preparation for audiology and prepared by a representative panel of the broad field of audiology?

- What is the current status of the Praxis examination? Has it truly been revamped and strengthened to emphasize the difference between master’s level education and doctoral level education? Does it truly reflect the knowledge and skills of a doctoral level audiologist instead of a master’s level audiologist? If it doesn’t, it should. The revision should be completed by individuals who represent the broad field of audiology.
Response:

- The Educational Testing Service (ETS) has a board of audiologists who participate in the writing of the national exam which is under the purview of ETS.
- Recommends that representatives from audiology organizations and audiologists that have participated in the review and writing of the new exam answer these questions.
- No individual present at this summit is in a position to answer these questions at this point.

Commenter:

- Praxis exam from ETS has been updated and is continually being updated. Questions that are no longer current are deleted. Revising the current exam is more economical than developing a new one because it is very expensive to develop a new exam. (See Appendix F-3 for more detailed response.)

**Topic:** Request for clarification - overlap among/between organizations

- Make a diagram of all the organizations; if there is overlap, maybe can eliminate some.
The Council for Clinical Certification (CFCC) has considered the request for clarification of its position concerning the requirement for supervisors of student clinical practicum to hold the Certificate of Clinical Competence issued by the American Speech-Language-Hearing Association (ASHA) emanating from discussions at the Audiology Summit II. The CFCC has re-affirmed that the standards require the clinical hours students need to qualify for ASHA certification must be supervised by someone who holds the ASHA CCC in the area in which they are supervising.

The CFCC asserts that ASHA certification verifies that those individuals who hold the credential meet the standards that we accept as assuring at least minimal competence and adherence to the ASHA Code of Ethics. The CFCC cannot verify that other individuals either meet the competence requirements of the ASHA CCC or that they adhere to the ASHA Code of Ethics.

The ASHA Position Statement on Clinical Supervision in Speech-Language Pathology and Audiology (ASHA, 1985) describes the 13 tasks that are performed as a part of “clinical teaching, defined as the tasks and skills of clinical teaching related to the interaction between a clinician and client”. The document further outlines the competencies for supervisors to complete these tasks. The document states that “…the demonstration of quality clinical skills in supervisors is generally accepted as a prerequisite to supervision of students….” The CFCC maintains that the ASHA CCC allows us to document the supervisor’s clinical skills that are required by the Position Statement.

For audiology students seeking ASHA certification, the hours that count toward the required 1820 hours must be supervised by an individual who holds ASHA certification. However, students may have experiences for skill development that are taught or supervised by individuals who do not hold certification through ASHA. There are two ways in which this can be accomplished. First, individuals without ASHA certification (including those from other professions or disciplines) may supervise or direct experiences that are not counted toward the minimum 1820 clinical hours. Second, individuals who do not hold the ASHA CCC (including those from other professions or disciplines) may participate in the supervisory process in collaboration with an individual who does hold ASHA certification as long as the supervisor holding the ASHA CCC maintains responsibility for the supervision of the student. In the latter case, these co-supervised experiences would count toward the 1820 supervised clinical hour requirement. The CFCC does not have specific requirements regarding the extent of direct supervision by the qualified supervisor. However, CAA accreditation Standard 3.5A states that “clinical supervision is commensurate with the clinical knowledge and skills of each student, and clinical procedures ensure that the welfare of each person served by students is protected, in accordance with ASHA’s Code of Ethics and relevant federal and state regulation.” Implementation statements include the following: “The program must demonstrate how the nature and amount of supervision are determined and adjusted to reflect the
competence and growth of each student. The program’s written policy statements must describe the extent to which students are supervised and have access to supervisory or preceptor consultation when providing services to clients/patients.” The CFCC assumes that the supervisor/preceptor is a person who holds ASHA’s Certificate of Clinical Competence. However, as described above, other individuals can also participate in the process of developing clinical skills.
APPENDIX F-2: CAA Response

The Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) considered the request for clarification of its positions concerning supervisor qualifications for student clinical practicum and its expectations for programs to prepare students to be eligible for relevant state and national credentials upon graduation, which emanated from discussions at the Audiology Summit II. The CAA has provided the following statements to highlight the language in the revised accreditation standards that will be implemented January 1, 2008, and to clarify its intent related to these issues.

Regarding the first issue, an excerpt from the Implementation language of the revised Standard 2.1 reads as follows: "Qualifications and competence to teach graduate-level courses and to provide clinical education must be evident in terms of appropriateness of degree level, practical or educational experiences specific to responsibilities in the program, and other indicators of competence to offer graduate education. All individuals providing clinical education, both on-site and off-site, must have appropriate experience and credentials for the professional area in which clinical education is provided."

The CAA’s intent in this standard is to place the emphasis on qualifications in general, and not solely on certification status. However, it will be the responsibility of the program to demonstrate to the CAA the appropriateness of the individual for the type of activity and supervision being provided to the student. The Council’s intent is that individuals without ASHA certification could be appropriate supervisors, depending on their other qualifications.

Related to the second issue, the Implementation language of the revised standard 3.1A for audiology is as follows: “The program must ensure that students have opportunities to acquire the knowledge and skills needed for entry into independent professional practice across the range of practice settings (including but not limited to hospitals, schools, private practice, community speech and hearing centers, and industry) and to meet relevant licensure and certification standards.”

Similarly, Standard 3.1B for speech-language pathology reads as follows: “The intent of this standard is to ensure that program graduates are able to acquire the knowledge and skills needed for entry into professional practice and to meet relevant licensure and certification standards.”

The CAA’s intent in these standards is to indicate that students must be given the opportunity to achieve ASHA certification (as well as other relevant state and national credentials such as teacher certification or licensure). This would include having ASHA-certified supervisors available to provide all students who wish to achieve certification with the number of hours and the range of experiences required for certification, but it does not mean that all students must meet certification requirements or seek certification. The CAA believes that programs should provide students with the options and that it should be their informed decision rather than a requirement met by every student.
APPENDIX F-3: Academic Affairs Response

Topic: Has the Praxis examination been revamped /rewritten to reflect the doctoral level preparation for audiology and prepared by a representative panel of broad field of audiology?

Yes. The Praxis Audiology exam is developed according to the basic tenet that exam items for a credentialing exam assess the knowledge and skills required to perform the job in the context of current practice. The blueprint for the exam is derived from the knowledge and skills generated from the practice and curriculum analysis that resulted in the establishment of the doctoral entry degree requirement for the profession of audiology. Accordingly, the Praxis exam in audiology reflects the requisite entry level knowledge and skills for current audiology practice.

The Praxis exam in Audiology is developed by a National Advisory Committee (NAC) and an item-writing committee whose collective experience reflects the broad range of the field of audiology represented in the content areas of the exam blueprint.

Exam development is an ongoing process. New forms of the Praxis Audiology exam have been developed within the past two years that were first administered in September 2005 and January 2006. Existing items and test forms have been reviewed for currency and relevancy of content at regular intervals with revisions and updates made as necessary. A new bank of exam questions has been developed within the past two years and new questions and test forms will continue to be developed on an ongoing basis in the future.

In September 2004, the total number of items on the Praxis Audiology exam was reduced from 150 to 120 items while maintaining the exam administration time at two hours. The reduction in the total number of test items reflected a reduction in discreet test questions and an increase in integrated test questions that require the candidate to synthesize and apply information based upon cases, data sets and research passages. This change represents one example of the ongoing revisions to the Praxis Audiology exam. In 2006, a new practice analysis of the profession of audiology will be initiated. The results of that analysis will be used to revise the current exam blueprint which will impact future exam content and format.
APPENDIX G: Glossary of Terms

Although the Summit did not include a discussion of specific definitions, the Advisory committee approved the following glossary for the purposes of this report:

**Clinical Education** – instruction in the application of knowledge and skills in clinically relevant situations

**Clinical Practicum** – clinical instruction and supervised clinical experiences in the application of knowledge and skills

**Core** - those critical areas of clinical practice that require a depth of skill or proficiency upon completion of the doctoral program, regardless of an individual program’s specific mission, in order to begin professional practice

**Course Work** – a class offered for college credit that is part of a larger curriculum of study, and may be for academic, clinical, or laboratory experience

**Essential** - basic or indispensable; necessary; fundamental; necessary

**Externship** – clinical experience off campus designed to allow a student to apply knowledge and skills of assessment and treatment to clinically relevant patients under the supervision of a clinical supervisor or preceptor; the final clinical education experience in an audiology doctoral program

**Preceptor** – an expert or specialist who gives practical training to a student; the individual who supervises and mentors a student during a clinical education experience

**Depth of Skill** - the level of independence necessary for practitioners to enter the profession, while seeking expert advice when needed.

**Proficiency** - a skill level that is consistent or developed, requiring guidance or infrequent consultation

**Rotation** - a short-term clinical education experience that may occur either in a university clinic or an external placement setting throughout the student’s audiology doctoral program
The following individuals and organizations made presentations regarding the topics identified in the abstracts at the round table discussions during the Clinical Education Exchange: Resources and Models.

Table 1

<table>
<thead>
<tr>
<th>Title:</th>
<th>The Audiology Matching Program</th>
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</thead>
<tbody>
<tr>
<td>Authors:</td>
<td>Barry A. Freeman, PhD, Nova Southeastern University</td>
</tr>
<tr>
<td></td>
<td>Ian Windmill, PhD, University of Louisville</td>
</tr>
<tr>
<td></td>
<td>Richard Gans, PhD, American Institute for Balance</td>
</tr>
</tbody>
</table>

Abstract: The Audiology Matching Program provides an efficient and fair process to help Audiology students entering the 4th year of their academic program find externship locations located throughout the country. Through an orderly, computer-based process, students from participating universities and externship locations are “matched” based on the preferences of each party. The matching process does not select externship sites for students. Students must evaluate externship sites according to their individual criteria and program requirements, and externship sites must evaluate potential externs. The matching algorithm, the impact and responsibilities of academic programs, students and externship sites, costs, and timeline for implementation will be discussed.

Table 2

<table>
<thead>
<tr>
<th>Title:</th>
<th>The University of Texas Medical Branch (UTMB) Audiology Residency Model</th>
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<tr>
<td>Author:</td>
<td>Deborah L. Carlson, PhD, The University of Texas Medical Branch</td>
</tr>
</tbody>
</table>

Abstract: The University of Texas Medical Branch has hosted a one year residency in Audiology since 1993. Developed in the former Clinical Fellowship Model, the position has been adapted to the 4th year Audiology Externship. The clinical experience is broad-based and evaluated through the use of a variety of competency measures. A brief overview of applicant selection, clinical rotations, resident responsibilities, competency assessment tools, supervision methods, and current challenges will be presented followed by discussion and information exchange among participants.
Table 3

Title: Formative Assessments for Audiology Student Clinicians  
Author: Gail Weddington, AuD, Central Michigan University  

Abstract: There may be as many means of assessing clinical knowledge, skills, and abilities of audiology students as there are evaluators and clinical sites; perhaps more! Formative assessment of students’ clinical abilities throughout their academic careers is critical to evaluating the success of clinical and academic preparation, informing clinical preceptors of students’ instructional needs, and assisting students with identifying and meeting their individual educational objectives. Participants in this roundtable discussion will share ideas and tools used for formative assessment. Assessment objectives and priorities will also be discussed.

Table 4

Title: Interdisciplinary Clinical Education of AuD Students  
Author: David Downs, PhD, Wichita State University  

Abstract: Professional organizations in medicine and allied health, including ASHA, are mandating that training programs include interdisciplinary clinical education of their students. Over the past decade, I’ve been a co-developer, clinical educator, LEND discipline head, and researcher on several university interdisciplinary curricula, workshops, clinical teams, and health fairs. During this roundtable, I and my colleagues will share our experiences, models, and innovations to improve participation, collaboration, and evaluation of AuD students in “true” interdisciplinary clinical education. Finally, we will discuss how audiologists and optometrists traditionally have viewed interdisciplinary teamwork differently, a possible pitfall when modeling AuD programs like schools of optometry.

Table 5

Title: An Integrated Approach to the Acquisition of Clinical Skills  
Authors: Scott K. Griffiths, PhD, University of Florida  
         Alice E. Holmes, PhD, University of Florida  

Abstract: Successful AuD programs must coordinate the acquisition of clinical skills through a variety of clinical placements, and accommodate the strengths and needs of each student. With 87 AuD students over the last seven years, The University of Florida has developed an integrated approach to the clinical development of the audiology student encompassing placement decisions, skills tracking, formative assessments, assimilation of feedback from classroom, clinic, and laboratory supervisors, externship placement and summative assessments. We would like to share our model for clinical development of the AuD student, including placement and evaluation protocols, web-based tracking and communication tools, and trouble-shooting/remediation experiences.
Table 6

Title: ASHA Special Interest Divisions as Resources for Audiology Clinical Education
Author: M. Patrick Feeney, PhD, University of Washington
        Chair, ASHA Special Interest Divisions, Audiology Coordinating Committee

Abstract: The four audiology-related Divisions of ASHA offer resources for the practicing clinician
and trainee. Examples of resources developed by the Audiology Divisions will be presented.
These include a new joint publication *Perspectives on Audiology*, and separate Division
*Perspectives*. For example, the September 2005 issue of *Perspectives on Hearing and Hearing
Disorders* focused on ototoxicity, and Division 6 plans to address otoprotectants, aging, and
evidence-based practice in 2006 issues. A new “Let’s Talk” series of patient-information pamphlets
on *Contemporary Audiology Issues--Disorders and Treatment* was developed with the Audiology
Professional Practice Unit, and an updated bibliography on Aural Rehabilitation is being prepared.

Table 7

Title: First Year Teaching Clinics: University of Texas at Dallas Callier Center
Author: Carol Cokely, PhD, University of Texas at Dallas

Abstract: “On-campus” clinic rotations for AuD students at the University of Texas at Dallas (UTD)
are completed at the The Callier Center for Communicative Disorders. Callier operates as a free-
standing, community clinic, with a number of specialty clinics, large-pediatric population, and
difficult-to-test patients. Whereas the Center offers valued diversity in service and population, it is
not best-suited for first-year AuD students. Adult Teaching Clinic, Pediatric Teaching Clinic and
Adult Evoked Potential Clinics are conducted in the fall, spring and summer semesters, respectively
and have facilitated student’s integration into the Clinic. Methods and teaching tools will be shared.
APPENDIX I: Participant List

Harvey B. Abrams  
Bay Pines VA Health Care System  
2701 Pinellas Point Drive  
St. Petersburg, FL 33712  
harvey.abrams@med.va.gov

Robert Steven Ackley  
Gallaudet University  
Washington, DC 20002  
robert.ackley@gallaudet.edu

Mary F. Batson  
The Children's Hospital of Philadelphia  
2408 David Dr #A  
Havertown, PA 19083  
batsonf@email.chop.edu

Christopher D. Bauch  
Mayo Clinic  
200 1st Street, SW  
Rochester, MN 55905  
bauch.christopher@mayo.edu

Marlene A. Bevan  
Audicare Hearing Center  
4620 US 31 North  
Traverse City, MI 49686-3757  
bevan@audicare.com

Ingrid M. Blood  
Pennsylvania State University  
Dept of Comm Sciences & Disorders  
110 Moor Building  
University Park, PA 16802  
i2b@psu.edu

Susan J. Brannen  
Monroe 2-Orleans BOCES  
474 Benson Road  
Victor, NY 14564  
sbrannen@monroe2boces.org

Michael Brown  
Christie Clinic  
ENT Department  
101 West University  
Champaign, IL 61820-3909  
mpbrown@christieclinic.com

Dennis L. Burrows  
Constance Brown Hearing Centers  
1634 Gull Road  
Kalamazoo, MI 49048  
dennisb@cbrown.org

Deborah L. Carlson  
University Of Texas Medical Branch  
Center of Audiology & Speech Pathology  
301 University Blvd.  
Galveston, TX 77555-0523  
dicarlso@utmb.edu

Arlene E. Carney  
University of Minnesota  
Dept Speech-Language-Hearing Sciences  
100 Church Street, SE  
Minneapolis, MN 55455  
carne005@umn.edu

Michael J. Cevette  
Mayo Clinic Arizona  
13400 East Shea Blvd.  
Scottsdale, AZ 85259  
mcevette@mayo.edu

Ronny D. Chambers  
University of Illinois at Urbana-Champaign  
Dept. of Speech & Hearing  
901 S 6th St.  
Champaign, IL 61820-6206  
rdc@uiuc.edu

William W. Clark  
Washington University School of Medicine  
660 S. Euclid Ave. Box 8042  
St. Louis, MO 63110  
clarkw@wustl.edu

Carol G. Cokely  
University of Texas at Dallas  
600 Ridgecrest Circle  
Denton, TX 76205  
cokely@utdallas.edu

Deborah S. Culberston  
East Carolina University  
Room 7 Belk Annex 5  
Greenville, NC 27858  
culbertsond@mail.ecu.edu
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vic S. Gladstone</td>
<td>ASHA</td>
<td>10801 Rockville Pike, Rockville, MD 20852</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:vgladsto@asha.org">vgladsto@asha.org</a></td>
</tr>
<tr>
<td>Theodore J. Glattke</td>
<td>University of Arizona</td>
<td>Dept of Speech Hearing Science, PO Box 210071 Bldg 71, Tucson, AZ 85721-0071</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:glattke@email.arizona.edu">glattke@email.arizona.edu</a></td>
</tr>
<tr>
<td>Edward L. Goshorn</td>
<td>University of Memphis</td>
<td>807 Jefferson Avenue, Memphis, TN 38105</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:egoshorn@memphis.edu">egoshorn@memphis.edu</a></td>
</tr>
<tr>
<td>Elizabeth R. Gray</td>
<td>Rush University</td>
<td>1508 West Harrison #3B, Chicago, IL 60607</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:Elizabeth_Gray@rush.edu">Elizabeth_Gray@rush.edu</a></td>
</tr>
<tr>
<td>Scott K. Griffiths</td>
<td>University of Florida</td>
<td>1521 NW 89Th Terrace, Gainesville, FL 32606</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:sgriff@csd.ufl.edu">sgriff@csd.ufl.edu</a></td>
</tr>
<tr>
<td>Alison M. Grimes</td>
<td>UCLA Medical Center</td>
<td>200 UCLA Medical Center Plaza, Suite 540, Los Angeles, CA 90095</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:agrimes@mednet.ucla.edu">agrimes@mednet.ucla.edu</a></td>
</tr>
<tr>
<td>Sue T. Hale</td>
<td>Vanderbilt University Med Ctr</td>
<td>MCE South Tower, Room 8310, 1215 21st Ave S Rm 8310 S Tower, Nashville, TN 37232-8242</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:sue.t.hale@vanderbilt.edu">sue.t.hale@vanderbilt.edu</a></td>
</tr>
<tr>
<td>Jaynee A. Handelsman</td>
<td>University of Michigan</td>
<td>2779 Georgetown Blvd, Ann Arbor, MI 48105</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:jaynee@med.umich.edu">jaynee@med.umich.edu</a></td>
</tr>
<tr>
<td>Martha L. Harney</td>
<td>University of Washington</td>
<td>Speech and Hearing Clinic, 4131 15th Ave NE, Seattle, WA 98105-6299</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:mharney@u.washington.edu">mharney@u.washington.edu</a></td>
</tr>
<tr>
<td>Michael A. Hefferly</td>
<td>Univ of Illinois Medical Center</td>
<td>1855 W. Taylor, B76, Chicago, IL 60612-7244</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:mheff@uiuc.edu">mheff@uiuc.edu</a></td>
</tr>
<tr>
<td>Gilbert R. Herer</td>
<td>Children's National Medical Center</td>
<td>11309 Marcliff Rd., Rockville, MD 20852</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:gherer@cnmc.org">gherer@cnmc.org</a></td>
</tr>
<tr>
<td>Patricia A. Highley</td>
<td>University of Arkansas-Little Rock</td>
<td>University of Arkansas for Medical Sciences, 129 White Oak Lane, Little Rock, AR 72207-2406</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:highleypatricia@uams.edu">highleypatricia@uams.edu</a></td>
</tr>
<tr>
<td>Theresa E. Hnath-Chisolm</td>
<td>University of South Florida</td>
<td>Dept Comm Sciences &amp; Disorders, PCD 1017, Tampa, FL 33620</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:chisolm@cas.usf.edu">chisolm@cas.usf.edu</a></td>
</tr>
<tr>
<td>Alice E. Holmes</td>
<td>University of Florida</td>
<td>University of Florida Health Science Center, BOX 100174, Gainesville, FL 32610</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:aholmes@phhp.ufl.edu">aholmes@phhp.ufl.edu</a></td>
</tr>
<tr>
<td>Lisa L. Hunter</td>
<td>University of Utah</td>
<td>Dept of Communication Disorders, 390 S 1530 E Room 1221 BEHS, Salt Lake City, UT 84112</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:lisa.hunter@hsc.utah.edu">lisa.hunter@hsc.utah.edu</a></td>
</tr>
<tr>
<td>Richard R. Hurtig</td>
<td>University of Iowa</td>
<td>Dept of Speech Pathology &amp; Audiology, 119 SHC, Iowa City, IA 52242-1012</td>
</tr>
<tr>
<td></td>
<td></td>
<td><a href="mailto:richard-hurtig@uiowa.edu">richard-hurtig@uiowa.edu</a></td>
</tr>
</tbody>
</table>
Christa Smith  
University of Wisconsin-Madison  
Communication Disorders Dept  
1975 Willow Dr, Room 326  
Madison, WI 53706  
mckeandsmith@wisc.edu

Eileen Smith  
Methodist Healthcare  
1265 Union Avenue  
Memphis, TN 38104  
smithei@methodisthealth.org

Laura K. Smith-Olinde  
University of Arkansas for Medical Sciences  
AUSP-Spch Bldg 120  
2801 S. University  
Little Rock, AR 72204  
SmithOlindeLauraK@uams.edu

Walter J. Smoski  
Illinois State University  
Mail Code 4720  
Normal, IL 61790-4720  
wsmoski@ilstu.edu

Brad A. Stach  
Henry Ford Health System  
2799 West Grand Blvd  
Detroit, MI 48202  
bradstach@mac.com

Nancy A. Stecker  
University of Buffalo  
37 Windsor Avenue  
Buffalo, NY 14209  
nstecker@buffalo.edu

Janet A. Stein  
University of Cincinnati  
G45C French East Bldg  
PO Box 670379  
Cincinnati, OH 45267-0394  
steinjt@email.uc.edu

Nanette L. Sturgill  
Primary Children's Medical Center  
OP Rehab  
100 N Medical Dr.  
Salt Lake City, UT 84113  
pcnsturg@ihc.com

Richard E. Talbott  
University of South Alabama  
4009 Sedgwick Court  
Mobile, AL 36693  
rtalbott@usouthal.edu

Claire F. Taub  
Montclair State University  
Dept of Comm Sciences & Disorders  
1 Normal Ave  
Montclair, NJ 07043  
taubc@mail.montclair.edu

Patti Tice  
ASHA  
10801 Rockville Pike  
Rockville, MD 20852  
ptice@asha.org

Maureen Valente  
Washington University School of Medicine  
Campus Box 8042  
600 S. Euclid Avenue  
St Louis, MO 63110  
ValenteL@wustl.edu

Dennis D. Van Vliet  
HEAR USA/HEARx WEST  
4860 Stonehaven Dr  
Yorba Linda, CA 92887  
dvanvliet@earthlink.net

Lana B. Ward  
University of North Texas  
PO Box 305010  
Denton, TX 76203  
lward@unt.edu

Gail L. Weddington  
Central Michigan University  
Audiology Clinic  
Mount Pleasant, MI 48859  
gail.l.weddington@cmich.edu

Barbara E. Weinstein  
The Graduate Center of CUNY  
365 Fifth Avenue  
New York, NY 10016-4309  
bweinstein@gc.cuny.edu

Debra H. Weisleder  
University of North Carolina  
2708 Ashland Dr.  
Durham, NC 27705  
weislede@med.unc.edu