Preparation in Educational Audiology: A Survey of Academic Programs in Audiology

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Abstract

A survey of academic programs accredited by the American Speech-Language-Hearing Association (ASHA) in audiology was conducted to determine the preparation of students in knowledge and skills targeting the minimum competencies for educational audiologists as established by the Educational Audiology Association (EAA). Responses from 48 programs generally indicate that students receive considerable academic and clinical preparation for those competencies associated with assessment and other mainstream areas of clinical audiology but substantially less preparation in most of the competencies related to audiology within the educational setting. Thus, current programs in audiology do not appear to be preparing graduates any better for employment in the schools than has been reported in the past.

Introduction

Audiologists have been employed in the schools for more than four decades. Early on it became clear that many of the duties and responsibilities of educational audiologists are much different than for most clinical audiologists (Johnson, Benson, and Seaton, 1997). A number of surveys (Blair, Wilson-Vlotman, and Von Almen, 1989; English, 1994; Seaton, Von Almen, and Blair, 1994; Wilson-Vlotman and Blair, 1986) collectively demonstrated that educational audiologists practicing during that time felt that their educational training had not prepared them adequately to meet many of their responsibilities in the schools. To address this issue, the Educational Audiology Association (EAA) described and adapted minimum competencies for educational audiologists (EAA, 1994). This document was developed, in part, to provide assistance and motivation to academic programs in audiology to initiate much-needed improvements in the academic preparation of future educational audiologists. With this in mind, two separate surveys were conducted to obtain more current information regarding a variety of issues concerning the extent to which present and future educational audiologists are able to meet these important competencies. One survey (Curiel and Nerbonne, 2002) focused on gathering information from present-day educational audiologists about how effective they perceive their academic and clinical training to have been in preparing them to meet the EAA's minimum competencies. The companion survey, reported in this article, sought to gather information from the current academic programs in audiology in the U.S. concerning the extent to which they now prepare students to meet each of the competencies for educational audiologists set forth by the EAA.

Methodology

A 38-item questionnaire was developed to determine the amount of academic and clinical preparation in educational audiology that graduate programs currently provide for their students. The questionnaire (see Appendix A) was based on a comprehensive set of minimum competencies for educational audiologists developed by the EAA in 1994. The competencies included in this document highlight EAA's vision of the key knowledge and skills necessary to provide adequate and effective audiologic services in an educational setting. The questionnaire, along with a brief cover letter and a stamped self-addressed return envelope, were sent in March, 2000, to the department chair of each of 114 graduate programs accredited in audiology by the American Speech-Language-Hearing Association (ASHA) in 2000. The cover letter described the purpose of the survey and requested that the questionnaire be completed by the most appropriate person(s) in the audiology program. Respondents were assured that complete confidentiality of individual responses would be maintained. Two additional follow-up mailings were done during the next three months to all non-respondents.

Results

Respondents

Completed surveys were received from 48 programs, resulting in a 43% response rate. A total of 42 (87%) came from programs with a Master's degree, with the remaining 6 (13%) coming from programs offering the Doctor of Audiology degree (Au.D.).

Coursework/Practicum Preparation-Assessment

Items 6a-6h from the questionnaire generally pertained to competencies related to audiologic assessment, and these results are found in Table 1. Most of these competency areas were reported to be covered academically in 2-3 courses. Estimates of the number of classroom hours of instruction devoted to these competency areas are contained in Table 2. Those receiving the most hours of instruction included pure tone and conventional speech audiometry, as well as ABR measures. Otoscopy, newborn hearing screening, preschool/school-age screening, and APD testing received considerably fewer hours of classroom time. Table 3 shows the distribution of the responding programs with respect to the clock hours of clinical practicum typically provided for the assessment competency areas. As can be seen, programs reportedly provide students more practicum experience in pure tone, speech and immittance audiometry, and considerably less in newborn and preschool/school-age hearing screening, as well as APD assessment.

Table 1. Percentage of Programs Reporting Coverage of Specific Hearing Assessment Competency Areas, as a Function of the Number of Courses in Which Each Area Typically is Covered (N=48)

TOPIC   NUMBER OF COURSES

	None	1	2	3	4	5
Otoscopy	2.1	25.0	38.6	27.1	6.3	0.0
Immittance measurements	0.0	10.4	39.6	35.4	12.5	2.1
Pure tone air & bone conduction threshold testing	0.0	14.6	35.4	37.5	12.5	0.0
SRT and word recognition testing	0.0	14.6	43.8	33.3	8.3	0.0
ABR measures	0.0	25.0	52.1	16.7	4.1	2.1
Central auditory processing disorder testing	0.0	35.4	43.8	18.8	2.1	0.0
Newborn hearing screening	0.0	43.8	45.8	8.3	2.1	0.0
Preschool/school-aged hearing screening	2.1	31.3	50.0	16.7	0.0	0.0

Table 2. Percentage of Programs Reporting Coverage of Specific Hearing Assessment Competency Areas, as a Function of the Number of Classroom Hours in Which Each Area Typically is Covered

TOPIC   NUMBER OF CLASSROOM HOURS

	N	None	1-10	11-20	21-30	31-40	41+
Otoscopy	44	0.0	84.1	11.4	0.0	4.6	0.0
Immittance measurements	43	0.0	32.6	41.9	14.0	9.3	2.3
Pure tone air & bone conduction threshold testing	43	0.0	27.9	34.9	23.3	9.3	4.7
SRT and word recognition testing	43	0.0	32.6	37.2	20.9	9.3	0.0
ABR measures	42	0.0	9.5	28.6	26.2	9.5	26.2
Central auditory processing disorder testing	43	0.0	39.5	27.9	14.0	9.3	9.3
Newborn hearing screening	42	0.0	57.1	26.2	11.9	4.8	0.0
Preschool/school-aged hearing screening	42	2.4	64.3	26.2	4.8	2.4	0.0

Table 3. Percentage of Programs Reporting Coverage of Specific Hearing Assessment Competency Areas, as a Function of the Number of Clinical Clock Hours in Which Each Topic Typically is Covered

PROTOCOL/ TOPIC   NUMBER OF CLINICAL CLOCK HOURS

	N	None	1-10	11-20	21-30	31-40	41+
Otoscopy	44	0.0	22.7	27.3	6.8	2.3	40.9
Immittance measurements	44	0.0	0.0	13.6	25.0	13.6	47.7
Pure tone air & bone conduction threshold testing	44	0.0	0.0	4.6	9.1	11.4	75.0
SRT and word recognition testing	43	0.0	0.0	4.7	14.0	14.0	67.4
ABR measures	43	0.0	16.3	23.3	27.9	7.0	25.6
Central auditory processing disorder testing	43	0.0	34.9	16.3	16.3	16.3	16.3
Newborn hearing screening	43	0.0	23.3	34.9	14.0	9.3	18.6
Preschool/school-aged hearing screening	43	0.0	20.9	27.9	16.3	9.3	25.6

Coursework/Practicum Preparation-Core Areas of Educational Audiology

Tables 4 and 5 show the number of courses and classroom hours reported to be devoted to another large group of competency areas focused on audiology in the educational setting.   43

These data reveal 14 competency areas that most audiology programs reported covering in only one course or not at all. The other 15 areas generally received attention in 1-2 courses. Related to this, most of the competency areas (22 out of 29) linked directly with educational audiology receive either 0 or only 1-10 hours of classroom coverage. As indicated in Table 6, students are reported to receive either 0 or only 1-10 hours of practicum experience in 21 of these 29 competency areas.

Table 4. Percentage of Programs Reporting Coverage of Other Specific Educational Audiology Competency Areas, as a Function of the Number of Courses in Which Each Area Typically is Covered

Topic				Number of Courses		
	N	None	1-10	11-20	21-30	31-40	41+
General child development and management	39	10.3	35.9	25.6	10.3	5.1	12.8
Audiological assessment of children using procedures appropriate to their receptive and expressive language skills, cognitive abilities, and behavioral functioning	42	2.4	33.3	40.5	9.5	7.1	7.1
Consultation and collaboration with classroom teachers, and other professionals regarding the relationship of hearing and hearing loss to the development of academic and psychological skills	42	9.5	59.5	26.2	2.4	2.4	0.0
Written and verbal interpretation of audiometric results and implications appropriate for the intended audience (parent, teacher, or other professionals)	42	2.4	35.7	28.6	21.4	4.8	7.1
Case management/care cooridination with family, school, medical and community services	42	4.8	52.4	28.6	9.5	4.8	0.0
Appropriate medical referrals and follow-up procedures for children	42	0.0	45.2	35.7	9.5	4.8	4.8
Appropriate educational referrals and follow-up procedures	42	0.0	61.9	23.8	11.9	2.4	0.0
IFSP/IEP planning process and procedures, including legal issues regarding the rights of and due process for students, parents, teachers, etc.	42	7.1	76.2	14.3	0.0	0.0	2.4
IFSP/IEP planning processes and prodedures which utilize audiometric and other relevant information to determine educational option for the Deaf and hard of hearing child	42	9.5	73.8	14.3	0.0	0.0	2.4
Maintenance of records related to: screening, referral, follow-up, assessment, IFSP/IEP planning	42	7.1	81.0	4.8	4.8	0.0	2.4
Developing appropriate counseling skills for interacting with school-aged children and families, including emotional support, information about hearing loss and implications, and interaction strategies to maximize communication & psychosocial development	42	2.4	50.0	31.0	4.8	4.8	7.1
Learning about school systems, multi-disciplinary teams, and community and professional resources	42	4.8	71.4	14.3	7.1	2.4	0.0
Implementing inservice training in audiology for educational and support personnel	42	21.4	69.1	4.8	4.8	0.0	0.0
Training and supervision of paraprofessionals	41	63.4	31.7	4.9	0.0	0.0	0.0
Implementation of a hearing conservation program for preschool and school-aged children	42	19.1	61.9	19.1	0.0	0.0	0.0
Instilling sensitivity for family systems, diversity, and cultures, including the Deaf culture	44	4.6	52.3	31.8	2.3	2.3	6.8
Developing effective interpersonal and communication skills	44	11.4	34.1	36.4	9.1	4.6	4.6
Evaluation, selection, and maintenance of hearing aid technology for children	45	2.2	24.4	33.3	13.3	11.1	15.6
44Evaluation, selection, and maintenance of FM systems in a school setting	44	2.3	50.0	27.3	11.4	6.8	2.3
Evaluation, selection, and maintenance of cochlear implants for children	44	9.1	61.4	15.9	9.1	2.3	2.3
The structure of the hearing environment, including classroom acoustics, its implication on learning, and appropriate acoustic modifications	44	4.6	68.2	22.7	2.3	2.3	0.0
Awareness of cerumen management concerns, and techniques	44	6.8	77.3	13.6	2.3	0.0	0.0
Selection, calibration, and maintenance of audiology equipment	44	2.3	61.4	20.5	6.8	2.3	6.8
Knowledge of English language acquisition for children with hearing impairment	42	9.5	54.8	26.6	0.0	2.4	4.8
Knowledge of speech acquisition for children with hearing impairment	42	4.8	59.5	26.2	2.4	0.0	7.1
Knowledge of auditory skills development for children with hearing impairment	43	4.7	46.5	37.1	2.3	0.0	9.3
Knowledge of speechreading for children with hearing impairment	43	11.6	65.1	16.3	2.3	4.7	0.0
Knowlege of sign language/systems	43	7.0	55.8	14.0	11.6	0.0	11.6
Knowledge of total communication	43	7.0	65.1	20.9	0.0	0.0	7.0
Knowledge of auditory/oral communication	43	2.3	62.8	27.9	2.3	0.0	4.7

Table 5. Percentage of Programs Reporting Coverage of Other Specific Educational Audiology Competency Areas, as a Function of the Number of Classroom Hours in Which Each Area Typically is Covered

Topic		Number of Classroom Hours					
	N	None	1-10	11-20	21-30	31-40	41+
General child development and management	39	10.3	35.9	25.6	10.3.	5.1	12.8
Audiological assessment of children using procedures appropriate to their receptive and expressive language skills, cognitive abilities, and behavioral functioning	42	2.4	33.3	40.5	9.5	7.1	7.1
Consultation and collaboration with classroom teachers, and other professionals regarding the relationship of hearing and hearing loss to the development of academic and psychological skills	42	9.5	59.5	26.2	2.4	2.4	0.0
Written and verbal interpretation of audiometric results and implications appropriate for the intended audience (parent, teacher, or other professionals)	42	2.4	35.7	28.6	21.4	4.8	7.1
Case management/care cooridination with family, school, medical and community services	42	4.8	52.4	28.6	9.5	4.8	0.0
Appropriate medical referrals and follow-up procedures for children	42	0.0	45.2	35.7	9.5	4.8	4.8
Appropriate educational referrals and follow-up procedures	42	0.0	61.9	23.8	11.9	2.4	0.0
IFSP/IEP planning process and procedures, including legal issues regarding the rights of and due process for students, parents, teachers, etc.	42	7.1	76.2	14.3	0.0	0.0	2.3
IFSP/IEP planning processes and prodedures which utilize audiometric and other relevant information to determine educational option for the Deaf and hard of hearing child	42	9.5	73.8	14.3	0.0	0.0	2.4
Maintenance of records related to: screening, referral, follow-up, assessment, IFSP/IEP planning	42	7.1	81.0	4.8	4.8	0.0	2.4
Developing appropriate counseling skills for interacting with school-aged children and families, including emotional support, information about hearing loss and implications, and interaction strategies to maximize communication & psychosocial development	42	2.4	50.0	31.0	4.8	4.8	7.1
Learning about school systems, multi-disciplinary teams, and community and professional resources	42	4.8	71.4	14.3	7.1	2.4	0.0
Implementing inservice training in audiology for educational and support personnel	42	21.4	69.1	4.8	4.8	0.0	0.0
Training and supervision of paraprofessionals	41	63.4	31.7	4.9	0.0	0.0	0.0
Implementation of a hearing conservation program for preschool and school-aged children	42	19.1	61.9	19.1	0.0	0.0	0.0
Instilling sensitivity for family systems, diversity, and cultures, including the Deaf culture	44	4.6	52.3	31.8	2.3	2.3	6.8
Developing effective interpersonal and communication skills	44	11.4	34.1	36.4	9.1	4.6	4.6
Evaluation, selection, and maintenance of hearing aid technology for children	45	2.2	24.4	33.3	13.3	11.1	15.6
44Evaluation, selection, and maintenance of FM systems in a school setting	44	2.3	50.0	27.3	11.4	6.8	2.3
Evaluation, selection, and maintenance of cochlear implants for children	44	9.1	61.4	15.9	9.1	2.3	2.3
The structure of the hearing environment, including classroom acoustics, its implication on learning, and appropriate acoustic modifications	44	4.6	68.2	22.7	2.3	2.3	0.0
Awareness of cerumen management concerns, and techniques	44	6.8	77.3	13.6	2.3	0.0	0.0
Selection, calibration, and maintenance of audiology equipment	44	2.3	61.4	20.5	6.8	2.3	6.8
Knowledge of English language acquisition for children with hearing impairment	42	9.5	54.8	26.6	0.0	2.4	4.8
Knowledge of speech acquisition for children with hearing impairment	42	4.8	59.5	26.2	2.4	0.0	7.1
Knowledge of auditory skills development for children with hearing impairment	43	4.7	46.5	37.1	2.3	0.0	9.3
Knowledge of speechreading for children with hearing impairment	43	11.6	65.1	16.3	2.3	4.7	0.0
Knowlege of sign language/systems	43	7.0	55.8	14.0	11.6	0.0	11.6
Knowledge of total communication	43	7.0	65.1	20.9	0.0	0.0	7.0
Knowledge of auditory/oral communication	43	2.3	62.8	27.9	2.3	0.0	4.7

Table 6. Percentage of Programs Reporting Coverage of Other Specific Educational Audiology Competency Areas, as a Function of the Number of Clinical Clock Hours Typically Accumulated for Each Topic by a Student in Audiology.

Topic		Number of Clinical Clock Hours					
	N	None	1-10	11-20	21-30	31-40	41+
General child development and management	40	22.5	35.0	17.5	10.0	7.5	7.5
Audiological assessment of children using procedures appropriate to their receptive and expressive language skills, cognitive abilities, and behavioral functioning	41	0.0	22.0	19.5	7.3	13.6	36.6
Consultation and collaboration with classroom teachers, and other professionals regarding the relationship of hearing and hearing loss to the development of academic and psychological skills	42	11.9	50.0	11.9	11.9	9.5	4.8
Written and verbal interpretation of audiometric results and implications appropriate for the intended audience (parent, teacher, or other professionals)	42	0.0	23.8	16.7	9.5	14.3	35.7
Case management/care coordination with family, school, medical and community services	42	7.1	40.5	11.9	14.3	9.5	16.7
Appropriate medical referrals and follow-up procedures for children	41	2.4	31.7	22.0	14.6	12.2	17.1
Appropriate educational referrals and follow-up procedures	42	2.4	45.2	19.1	19.1	4.8	9.5
IFSP/IEP planning process and procedures, including legal issues regarding the rights of and due process for students, parents, teachers, etc.	42	19.1	59.5	14.3	4.8	0.0	2.4
IFSP/IEP planning processes and procedures which utilize audiometric and other relevant information to determine educational option for the Deaf and hard of hearing child	42	19.1	54.8	14.3	14.3	0.0	4.8
Maintenance of records related to: screening, referral, follow-up, assessment, IFSP/IEP planning	42	11.9	52.4	11.9	14.3	0.0	9.5
Developing appropriate counseling skills for interacting with school-aged children and families, including emotional support, information about hearing loss and implications, and interaction strategies to maximize communication & psychosocial development	42	2.4	31.0	33.3	7.1	7.2	19.1
Learning about school systems, multi-disciplinary teams, and community and professional resources	42	16.7	45.2	23.8	9.5	0.0	4.8
Implementing inservice training in audiology for educational and support personnel	42	28.6	61.9	4.8	2.4	2.4	0.0
Training and supervision of paraprofessionals	41	78.1	17.1	2.4	2.4	0.0	0.0
Implementation of a hearing conservation program for preschool and school-aged children	42	28.6	50.0	11.9	4.8	2.4	2.4
Instilling sensitivity for family systems, diversity, and cultures, including the Deaf culture	43	20.9	51.2	14.0	4.7	2.3	7.0
Developing effective interpersonal and communication skills	43	4.7	20.9	25.6	9.3	7.0	32.6
Evaluation, selection, and maintenance of hearing aid technology for children	44	2.3	9.1	27.3	20.5	11.4	29.6
Evaluation, selection, and maintenance of FM systems in a school setting	44	2.3	9.1	27.3	20.5	11.4	29.6
Evaluation, selection, and maintenance of cochlear implants for children	44	36.4	43.2	11.4	2.3	2.3	4.6
The structure of the hearing environment, including classroom acoustics, its implication on learning, and appropriate acoustic modifications	44	27.3	56.8	6.8	4.6	2.3	2.3
Awareness of cerumen management concerns, and techniques	43	14.0	53.5	9.3	6.7	9.3	6.7
Selection, calibration, and maintenance of audiology equipment	44	11.4	50.0	18.2	11.4	2.3	6.8
Knowledge of English language acquisition for children with hearing impairment	42	21.4	59.5	7.1	2.4	4.8	4.8
Knowledge of speech acquisition for children with hearing impairment	42	19.1	54.8	11.9	2.4	4.8	7.1
Knowledge of auditory skills development for children with hearing impairment	43	9.3	53.5	23.3	0.0	2.3	11.6
Knowledge of speechreading for children with hearing impairment	42	28.6	54.8	4.8	2.4	2.4	7.1
Knowlege of sign language/systems	42	23.8	54.8	9.5	4.8	2.4	4.8
Knowledge of total communication	42	23.8	57.1	9.5	4.8	0.0	4.8
Knowledge of auditory/oral communication	42	9.5	61.9	16.7	2.4	2.4	7.1

Course/Internship in Educational Audiology

33 of the 48 audiology programs responding (69%) indicated their curricula did not include a specific course focused on educational audiology. Most programs (85%) did report having an internship placement available for students in an educational setting. However, 77% of the programs offering that type of clinical placement did not require it.

Discussion

Survey data pertaining to academic and clinical preparation in areas thought to be important to educational audiology by the EAA generally indicate that current audiology programs tend to emphasize those competencies that also are associated with key areas of mainstream clinical audiology (pure tone, speech and immittance audiometry, ABR, hearing aids). There may be some justification for this, since these are fundamental areas of audiology and therefore are worthy of a degree of emphasis. However, students are provided with only limited classroom or clinical preparation in a majority of the competency areas identified by the EAA, as well as ASHA (1993), as important for an audiologist to function effectively in the educational setting. This has forced many graduates taking positions in educational audiology to learn much of what is needed "on the job."

To a significant extent, the deficiencies in preparation may relate to two major findings: 1) most programs do not offer a course devoted to educational audiology; and 2) a majority do not require a clinical internship placement in an educational setting. Many of the weaknesses revealed by the survey could be either minimized or eliminated if graduate programs in audiology were to require these important experiences for their students. The need for these improvements has been evident in the professional literature for some time (English, 1991; Seaton, Von Almen, and Blair, 1994), but this apparently has had little, if any, affect on current requirements. It also should be noted that both ASHA (1993) and EAA (1994) have recommended a practicum experience in the schools for students intending to become educational audiologists.

Graduate programs in audiology must begin collectively to assume more responsibility for adequately preparing students to meet the many varied responsibilities associated with a position in the schools. While programs clearly have focused primarily on meeting the needs of a majority of graduates for positions in more traditional clinical audiology settings, the fact remains that nearly 1,000 of their past graduates currently hold positions in educational audiology throughout the 50 states (Johnson, Benson, and Seaton, 1997). Changes must occur within existing audiologic programs, either in modifying current program requirements or developing an entirely new educational approach that focuses on educational audiology, to ensure that future graduates are better prepared to meet the challenges of providing audiologic services in the school setting. It is hoped that as programs transition to the Doctor of Audiology (Au.D.) degree, they will view this as an opportunity to expand and improve on the educational experiences offered students in educational audiology.

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Appendix A

SURVEY OF PREPARATION IN EDUCATIONAL AUDIOLOGY

PLEASE SELECT THE ANSWER THAT BEST FITS THE
GENERAL INSTRUCTION YOUR PROGRAM PROVIDES

1. Which of the following degree(s) in audiology offered through your program?

    _____Masters   _____Au.D.

2. How many total credits are required for graduation is/are from your Masters or Au.D. program?

    _____semester   or   _____quarter

3. How many students are currently enrolled in your audiology program at the Masters or Au.D. level?

    _____students

4. What is the typical number of total clinical practicum clock hours completed in audiology by a graduate student upon graduation from your program?

    _____average hours

5. Do you require a specific course in educational audiology in your graduate program?

    _____yes   _____no

PLEASE CIRCLE THE ANSWER THAT BEST FITS THE CLASSROOM / PRACTICUM INSTRUCTION YOUR PROGRAM PROVIDES FOR COMPONENTS OF EDUCATIONAL AUDIOLOGY

DOES YOUR AUDIOLOGY PROGRAM HAVE COURSEWORK/CLINICAL PRACTICUM RELATED TO HEARING ASSESSMENT FOR CHILDREN (BIRTH-18 YRS) IN THE FOLLOWING AREAS:

KEY:
1 = NONE 2 = 1-10 HRS
3 = 11-20 HRS 4 = 21-30 HRS
5 = 31-40 HRS 6 = 41+ HRS

		NUMBER OF COURSES WHICH COVER THIS TOPIC	APPROX. NUMBER OF CLASSROOM CLOCK HRS. OF INSTRUCTION ON THIS TOPIC	APPROX. NUMBER OF CLINICAL CLOCK HRS. OF EXPERIENCE ON THIS TOPIC
6a	Otoscopy?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
6b	Immittance measurements?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
6c	Pure tone air & bone conduction threshold testing?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
6d	SRT and word recognition testing?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
6e	ABR measures?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
6f	Central auditory processing disorder testing?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
6g	Newborn hearing screening?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
6h	Preschool/school-aged hearing screening?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6

DOES YOUR AUDIOLOGY PROGRAM HAVE COURSEWORK/CLINICAL PRACTICUM RELATED TO HEARING ASSESSMENT FOR CHILDREN (BIRTH-18 YRS) IN THE FOLLOWING AREAS:	NUMBER OF COURSES WHICH COVER THIS TOPIC	APPROX. NUMBER OF CLASSROOM CLOCK HRS. OF INSTRUCTION ON THIS TOPIC	APPROX. NUMBER OF CLINICAL CLOCK HRS. OF EXPERIENCE ON THIS TOPIC

KEY: 1 = NONE   2 = 1-10 HRS
           3 = 11-20 HRS   4 = 21-30 HRS
           5 = 31-40 HRS   6 = 41+ HRS

#	Question	Number of Courses	Classroom Clock Hrs.	Clinical Clock Hrs.
7	General child development and management?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
8	Audiological assessment of children using procedures appropriate to their receptive and expressive language skills, cognitive abilities, and behavioral functioning?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
9	Consultation and collaboration with classroom teachers, and other professionals regarding the relationship of hearing and hearing loss to the development of academic and psychological skills?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
10	Written and verbal interpretation of audiometric results and implications appropriate for the intended audience (parent, teacher, or other professionals)?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
11	Case management/care coordination with family, school, medical and community services?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
12	Appropriate medical referrals and follow-up procedures for children?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
13	Appropriate educational referrals and follow-up procedures?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
14	IFSP/IEP planning process and procedures, including legal issues regarding the rights of and due process for students, parents, teachers, etc.?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
15	IFSP/IEP planning process and procedures which utilize audiometric and other relevant information to determine educational options for the Deaf and hard of hearing child?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
16	Maintenance of records related to: screening, referral, follow-up, assessment, IFSP/IEP planning?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
17	Developing appropriate counseling skills for interacting with school-aged children and families, including emotional support, information about hearing loss and its implications, and interaction strategies to maximize communication and psychosocial development?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
18	Learning about school systems, multi-disciplinary teams, and community and professional resources?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
19	Implementing inservice training in audiology for educational and support personnel?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
20	Training and supervision of paraprofessionals?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
21	Implementation of a hearing conservation program for preschool and school-aged children?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6

DOES YOUR AUDIOLOGY PROGRAM HAVE COURSEWORK/CLINICAL PRACTICUM RELATED TO HEARING ASSESSMENT FOR CHILDREN (BIRTH-18 YRS) IN THE FOLLOWING AREAS:	NUMBER OF COURSES WHICH COVER THIS TOPIC	APPROX. NUMBER OF CLASSROOM CLOCK HRS. OF INSTRUCTION ON THIS TOPIC	APPROX. NUMBER OF CLINICAL CLOCK HRS. OF EXPERIENCE ON THIS TOPIC

KEY: 1 = NONE   2 = 1-10 HRS   3 = 11-20 HRS   4 = 21-30 HRS   5 = 31-40 HRS   6 = 41+ HRS

#	Topic	Courses	Classroom	Clinical
22	Instilling sensitivity for family systems, diversity, and cultures, including the Deaf culture?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
23	Developing effective interpersonal and communication skills?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
24	Evaluation, selection, and maintenance of hearing aid technology for children?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
25	Evaluation, selection, and maintenance of FM systems in a school setting?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
26	Evaluation, selection, and maintenance of cochlear implants for children?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
27	The structure of the learning environment, including classroom acoustics, its implications on learning, and appropriate acoustic modifications?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
28	Awareness of cerumen management concerns, and techniques?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
29	Selection, calibration, and maintenance of audiology equipment?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
30	Knowledge of English language acquisition for children with hearing impairment?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
31	Knowledge of speech acquisition for children with hearing impairment?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
32	Knowledge of auditory skills development for children with hearing impairment?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
33	Knowledge of speechreading for children with hearing impairment?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
34	Knowledge of sign language/systems?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
35	Knowledge of total communication?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6
36	Knowledge of auditory/oral communication?	0 1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6

37 Does your audiology program offer an internship or practicum in a school setting, with a supervising educational audiologist?

YES   NO   If Yes, is the internship required   YES   NO

38 If you do offer an internship in a school setting, what is the average total number of hours that each student spends in that type of setting?

	1	2	3	4	5
KEY:	1-10 hrs.	11-20 hrs	21-30 hrs	31-40 hrs	41+ hrs

Thank you for your time. Please return in enclosed envelope to: Brenda Beckrow, Dept. of Communication Disorders, CMU Mt. Pleasant, MI 48859