



LEARNER OBJECTIVES AND SELF-ASSESSMENT QUESTIONS EAA 2009 SUMMER CONFERENCE

SESSION TITLE: A 3-D Tour of the Central Auditory System

Learner Objectives:

Participants will be able to describe key structures of the central auditory system.

Participants will be able to discuss main functions of the central auditory system.

Self-Assessment Questions:

True/False: The insula is medial to the temporal lobe.

True/False: Reading stimulates the auditory system.

SESSION TITLE: Using Cued Speech to Maximize the Benefits of Cochlear Implants

Learner Objectives:

The participant will be able to:

List several ways that Cued Speech can benefit children fitted with cochlear implants and have knowledge of resources available for learning the Cued Speech system.

Describe some of the resources available regarding research and support for Cued Speech as a benefit to the cochlear implant and to speech, language and auditory development.

Describe how Cued Speech might be implemented in an auditory/oral program as an educational audiologist.

Self-Assessment questions:

Name two benefits of using Cued Speech with children fitted with a cochlear implant that you could use in:

- a) a consultative session with parents and/or
- b) in a staffing with other fellow professionals (i.e. speech-language pathologists, deaf educators, regular and special educators, other audiologists, administrator, etc.).

What strategies could the educational audiologist employ as a member of the total educational team to support and implement Cued Speech in the classroom?

SESSION TITLE: Hear The Difference: What Audiologists Need to Know About the BAHA System

Learner Objectives:

Participants will gain knowledge about direct bone conduction and its advantages over traditional bone conduction amplification.

Participants will gain skill in how one may evaluate the outcome of a BAHA fitting.

Self-Assessment Questions:

What is the underlying mechanism that allows BAHA to provide Direct Bone Conduction?

In direct bone conduction, how much additional gain may be accessed over traditional bone conduction amplification?

SESSION TITLE: Fitting FM: Developing Strategies to Comply with AAA Clinical Practice Guidelines

Learner Objectives:

Participants will be able to identify at least two strategies for complying with the fitting and verification section of the AAA Clinical Practice Guidelines: Remote Microphone Hearing Assistance Technologies for Children and Youth: Birth to 21.

Participants will be able to identify at least two strategies for addressing the management section of the AAA Clinical Practice Guidelines: Remote Microphone Hearing Assistance Technologies for Children and Youth: Birth to 21.

Self- Assessment questions:

Name two strategies you can employ to comply with the fitting and verification recommendations of the AAA Clinical Practice Guidelines: Remote Microphone Hearing Assistance Technologies for Children and Youth: Birth to 21.

Name two strategies you can employ to comply with the management section of the AAA Clinical Practice Guidelines: Remote Microphone Hearing Assistance Technologies for Children and Youth: Birth to 21.

SESSION TITLE: Bellis-Ferre Model Updates and Crosschecks

Learner Objectives:

Participants will be able to: Describe the three primary subtypes of the Bellis/Ferre model, including functional sequelae and central auditory diagnostic test patterns associated with each.

Identify limitations of this or any functional deficit profiling model.

Self-Assessment Questions:

Explain why Output-Organization and Associative Deficits are no longer included in the Bellis/Ferre Model of (C)APD.

Explain why the Bellis/Ferre model is inherently limited.

SESSION TITLE: Fifty Years of the SSW Test & How to use the Buffalo Survey From

Learner Objectives:

Participants will be able to describe the SSW test as a measure of APD.

Participants will be able to list 3 or more Qualified responses on the SSW test.

Participants will be able to describe the Buffalo APD Model.

Participants will be able to describe the Buffalo Model Questionnaire.

Self-Assessment Questions:

1. What category of the Buffalo Model is the most important?
 - a. Decoding (DEC) because it is associated with the most important communicative and academic functions
 - b. Organization (ORG) because it is critical to maintain proper order
 - c. Decoding (DEC) because it is easy to remediate
 - d. Tolerance-Fading Memory because it is associated with ADHD
 - e. a and c above
2. Why is noting delayed responses so important?
 - a. They are associated with Decoding deficits
 - b. They show additional effort is required to get correct answers
 - c. They are more resistant after therapy to show that underlying APD issues remain
 - d. All of the above
3. What are the categories of the Buffalo Model?
 - a. Decoding (DEC) and Tolerance-Fading Memory (TFM)
 - b. Organization (ORG) and Integration (INT)
 - c. Filtering (FIL) and Temporal Processing (TP)
 - d. a and b above
4. What does the Buffalo Model Questionnaire contain?
 - a. 10 questions dealing with early language developmental
 - b. 15 questions dealing with previous therapies
 - c. 48 questions dealing with APD and related issues
 - d. none of the above

SESSION TITLE: Using Technology and Support Personnel to Improve Access to Students in Remote Areas

Learning Outcomes:

At the completion of this course, participants will:

1. Identify the parameters under which professional Audiology associations endorse tele-practice
2. Identify the technical requirements of diagnostic and rehabilitative equipment in order to carry out tele-audiology
3. Identify the competencies of on-site personnel for diagnostic and rehabilitative audiological procedures

Self Assessment questions:

1. T/F: All clinical audiometers are capable of being used within a tele-audiology model.
2. Which two of the following are not requirements for performing Probe Microphone measurements via tele-audiology?
 - a) Licensed audiologists at each location
 - b) Computer-based REM
 - c) Dial up Internet Connection
 - d) Web Cam

SESSION TITLE: Conversations with my Audiologist

Learner Objectives:

Attendees will gain an appreciation of the importance of involving children from a very young age in the parent-audiologist-child triad.

Attendees will learn how self-determination theory can be applied in the pediatric habilitative process.

Self-Assessment Questions:

What strategies might audiologists use to help parents encourage their children to become more active participants in audiological appointments?

What are three identified needs children require for optimal functioning and personal well-being?

SESSION TITLE: Model for a Processing Continuum

Learner Objectives:

Participants will be able to differentiate between characteristics of auditory processing versus language processing.

Participants will be able to discuss a neurological hierarchy of processing, beginning with auditory perception and progressing through complex language processing.

Participants will be able to develop a model to guide assessment in processing disorders.

Self- Assessment Questions:

Describe the continuum of skills leading to linguistic processing.

How should assessment procedures differentiate between auditory and language processing?

SESSION TITLE: Standing in the Gap: From the clinic to the classroom

Learning Outcomes:

Participants will be able to:

Describe the present model of school based audiology in Arkansas.

List ways that school based audiologists and clinical audiologists can collaborate in order to improve services for students.

Self-Assessment Questions:

Describe how you can demonstrate the efficacy of classroom amplification for students with attention deficit disorder.

Indicate the auditory skills that can be improved with the use of classroom amplification for the student with attention deficit disorder.

What tools can be used to assess students' attending/listening skills in the classroom?

SESSION TITLE: Variation and Mechanisms of Auditory Neuropathy/Dys-synchrony: Implications for Evaluation and Management

Learner Objectives:

Participants will be able to:

Appropriately identify and evaluate individuals with auditory neuropathy/dys-synchrony.

Appropriately apply and interpret auditory physiologic test results.

Make appropriate recommendations for intervention and apply appropriate methods in the management of auditory neuropathy/dys-synchrony.

Self-Assessment Questions:

What measures best distinguish Auditory neuropathy/dys-synchrony from other auditory disorders?

How can auditory neuropathy/dys-synchrony be inherited?

SESSION TITLE: What CI Centers Tell Parents

Learner Objectives:

Participants will describe (re)habilitation for “older” pediatric cochlear implant recipients.

Participants will describe information that should be provided to the CI audiologist to assist in maximizing mapping results and instruction to the student and his family.

Self- Assessment questions:

1. Which of the following statements regarding newly implanted teenage cochlear implant recipients is NOT true:

- a. The numbers of teenagers receiving cochlear implants in recent years has increased significantly.
- b. Teenagers benefit from a brief period of one-on-one therapy.
- c. Most teenagers enthusiastically pursue one-on-one therapy.
- d. Appropriate tools for teen (re)habilitation post cochlear implantation include interactive computer software tools and audio books.
- f. Most teens who receive cochlear implants experienced profound prelingual deafness and their parents decided late to pursue a cochlear implant.

2. Which of the following are important to report on to a child’s cochlear implant audiologist to ensure the best possible map for the child?

- a. Which program does the child use most often?
- b. Which settings does he/she use?
- c. Are there times when he/she might use more volume?
- d. A and C

SESSION TITLE: Hearing Loss, AI, SII, Speech Understanding, Hearing Aids, and the Classroom

Learner Objectives:

Participants will describe the basic concept of the Articulation Index and how it relates to understanding speech

Participants will describe the ways that the effective AI can be reduced in a classroom.

Self-Assessment Questions:

Why can children with hearing loss or English as a second language perform poorer even when audibility is good?

What are three ways that AI can be reduced in a classroom and what can be done to prevent this?

SESSION TITLE: Behavioral and Electrophysiological Evidence of CANS Plasticity after Auditory Training

Learner Objectives:

Participants will be able to:

Define auditory plasticity

Discuss a behavioral battery to assess (C)APD.

Self-Assessment Questions:

Describe measurements to assess the effectiveness of auditory training on the central auditory nervous system.

Describe the different generators responsible for the auditory brainstem response, middle latency response, auditory late responses and the BioMARK.

SESSION TITLE: Guide to Access Planning: Getting the Most from Hearing Assistance after High School

Learner Objectives:

Participants will describe two regulations that affect access to FM/hearing assistance technology.

Participants will be able to implement tools for addressing self-advocacy skills necessary for use of FM and other communication access strategies for teens, young people, their parents and the professionals who support them.

Self-Assessment questions:

Transition services are described in:

1. IDEA
2. 504
3. A & B
4. ADA

The purpose of GAP is:

1. To promote use of FM after high school
2. To train college disability coordinators about FM and other access strategies
3. To provide self-advocacy tools for use with teens and young adults regarding their hearing loss
4. All of the above

SESSION TITLE: Intro to the APD Treatment Book

Learner Objectives:

Learners will be able to explain the need for the therapy book.

Learners will be able to navigate the therapy book to obtain the needed information.

Learners will be able to apply knowledge of the various programs when giving auditory training.

Self-Assessment questions:

What is unique about this book?

- a. it has close to 1000 pages
- b. techniques are presented in tables
- c. 35 different techniques are presented
- d. it reviews the Lindamood-Bell procedures

Why is the book important?

- a. Audiology started as a rehabilitation field
- b. APD is a widespread problem
- c. APD is not difficult improve
- d. All of the above

The book is:

- a. in loose leaf binder
- b. accompanied by a CD with the various tests
- c. geared primarily for Special Educators
- d. none of the above

SESSION TITLE: PCSSD Educational Audiology: Start with a Roux

Learner Objectives:

The participants will describe the need for establishing the ROUX (relationship, observation, understanding, expertise) within the collaborative/consultant model.

The participants will describe specific pre-intervention and intervention strategies necessary for the successful delivery of the audiology services appropriate for the student.

Self- Assessment Questions:

How can I establish an Educational Audiology program that is built on developing a relationship with the teacher? What two strategies can I implement in my educational setting that will foster a relationship with the teacher?

What expertise can I bring to the educational setting that will facilitate the listening environment of the student?

SESSION TITLE: Beyond IDEA: Laws that Support Children and Young Adults with Hearing Loss

Learner Objectives:

Parents will describe the major federal laws that provide for special educational services, general and communications access for children and adults with hearing loss.

Participants will list ways to coach parents, children and young adults with hearing loss on advocating for services that they are entitled and which can help them.

Self-Assessment questions:

1. Having laws in place for access and services:
 - a. Ensures that children and adults receive what they ask for
 - b. Helps people understand the expectations
 - c. Is the first step
 - d. Is less important than working directly with the local school district
2. When children with hearing loss graduate from high school and go to college:
 - a. Communication access provisions that they enjoyed disappear
 - b. May request and receive captioning or sign language interpreters
 - c. They may still require their college to provide the services of professionals like speech language pathologists or deaf educators
 - d. Are ensured that they will receive the communication access they need
 - e. May expect communication access services to be provided only if they attend a public college or university

SESSION TITLE: Research Pertaining to FM Fitting on Cochlear Implants

Learner Objectives:

Describe potential improvements in performance cochlear implant users achieve with personal FM use.

Describe FM and cochlear implant program parameters that optimize performance and benefit with personal FM systems.

Self-assessment questions:

- 1) Which of the following program parameters is most critical for allowing users of the Cochlear Corporation Nucleus Freedom cochlear implant to understand speech well in noise.
 - a. ADRO
 - b. Autosensitivity
 - c. Whisper
 - d. Beam
- 2) Which mixing ratio is recommended for children using personal FM with a cochlear implant in the classroom?
 - a. 1:1 or 50/50
 - b. 3:1 or 30/70
 - c. 6:1
 - d. FM only

SESSION TITLE: Keeping Kids “On Air” Working with Clinical Audiologists

Learner Objectives:

Participants will describe some strategies for communication with clinical audiologists to work towards more positive amplification outcomes for students.

Participants will describe several counseling strategies that could be used by educational or clinical audiologists to help parents better understand their child’s hearing loss and amplification.

Self-Assessment Questions:

What are some possible problems with pediatric hearing aid fittings?

How can I, as the educational audiologist, improve communication with the clinical audiologist so the parent is not “in the middle”?

SESSION TITLE: Auditory Neuropathy Spectrum Disorder (ANSD) from the Clinic to the Classroom: Issues in Identification, Amplification and (Re)Habilitation

Learning Outcomes:

Participants should be able to list characteristics of a child that may need to be referred for testing for Auditory Neuropathy Spectrum Disorder.

Participants should be able to name the three tests that, when combined, enable the audiologist to diagnose ANSD.

Self- Assessment Questions:

What type of amplification do students with a mild form of ANSD benefit from in the educational environment?

How do you know that a child is not benefiting from the amplification system he or she is currently using?

SESSION TITLE: SCAN-3 Test Battery for Auditory Processing Disorders: Standardization, Interpretation and Application

Learning Outcomes:

Participants will be able to:

Describe changes and important features of the SCAN-3: Tests for Auditory Processing Disorders

Know when it may be appropriate to administer the SCAN-3: Tests for Auditory Processing Disorders

Understand the basic principles of interpretation of the SCAN-3: Tests for Auditory Processing Disorders

Self-Assessment questions:

Describe the rationale for the revision of the SCAN-A and the SCAN-C.

List situations where administration of the SCAN-3 is appropriate for school age children.

SESSION TITLE: HAT Guidelines

Learner Objectives: (At the culmination of this session, participants will be able to:)

Address decision considerations important to the implementation of FM systems.

Discuss audiological considerations that impact selection and fitting of FM systems.

Self-Assessment questions:

1. The default remote-microphone HAT fitting arrangement for children/youth with normal hearing sensitivity who have special listening needs is:

- a. Bilateral ear-level wireless technology
- b. Large area sound-field systems
- c. Desktop sound-field systems
- d. There is no default fitting arrangement

2. To standardize verification terminology, the guidelines recommend a set of abbreviations addressing verification type, device, and level. Using this set of abbreviations, EFM/HA65SPL represents:

- a. Electroacoustic evaluation of the FM in the FM+HA mode of operation, with a 65 dB SPL input
- b. Educational evaluation of the FM and hearing aid in a classroom using 65 dB SPL inputs
- c. Separate electroacoustic evaluation of the FM and hearing aid using a 65 dB SPL input
- d. Behavioral evaluation of the FM in the FM+HA mode of operation, with a 65 dB SPL input

SESSION TITLE: Genetics and the Pediatric Audiologist

Learner Objectives:

Participants will be able to describe the pediatric audiologist's role in the referral to genetic services.

Identify two social or legal issues surrounding genetics and health care.

Self-Assessment Questions:

Describe basic human genetics terminology, processes and patterns of biological inheritance and variation.

Describe ways to collect family history information, develop a three generation pedigree, and formulate a basic interpretation of case history information.

Explain one's own professional role in the referral to genetic services or provision, follow-up and quality review of genetic services.

Identify and assess legal, ethical, social and cultural issues regarding genetic health care.

SESSION TITLE: Verification of Pediatric Hearing Aid and FM Fittings

Learner Objectives:

Participants will be able to list the relative advantages/disadvantages of soundfield testing, simulated real-ear measures and in-situ measures as verification techniques.

Participants will be able to describe the purpose and procedure for the evaluation of MF transparency in a fitting.

Self-Assessment Questions:

Which measures should be used in pediatric hearing aid fittings according to the 2003 AAA Pediatric Fitting Guidelines?

In a transparent FM fitting, what is the relationship of HA only and HA + FM when identical speech levels are used?

SESSION TITLE: Benefits of Adaptive FM Systems

Learner Objectives:

As a result of this activity, the participants will be able to:

1. Describe the differences between traditional FM and adaptive FM systems.
2. Describe appropriate ways to verify adaptive FM systems
3. Describe research that supports the benefits of adaptive FM systems

Self-Assessment questions:

1. The benefits of adaptive FM versus traditional FM are greatest when the background noise is:

- A. Moderate (57 dB SPL or greater)
- B. Minimal (less than 40 dBA)
- C. Excessive (greater than 80 dB SPL)
- D. Is of any level
- E. None of the Above

2. When verifying benefit of adaptive FM technology, it is important to use:

- A. speech that is fixed in intensity level
- B. speech and noise that vary in intensity level
- C. background noise less than 40 dBA
- D. closed set speech materials
- E. None of the above

SESSION TITLE: Advanced Technology and Pediatric Fittings

Learner Objectives:

Participants will be able to describe the environmental conditions under which noise reduction and adaptive directional systems will make signal modifications.

Participants will be able to identify multiple methods for connecting children to popular audio devices and applications.

Self- Assessment questions:

True/False: In advanced hearing instruments, the decision to go into a directional mode is based primarily on overall input level.

True/False: Many children are able to extract speech information from frequencies above 6000Hz.

SESSION TITLE: Role of the Educational Audiologist as a Member of Educational Facilities Planning Teams

Learner Objectives:

Participants will be able to:

Describe the role of the educational audiologist as an educational facility planning team member.

Identify important acoustical considerations for remodeling learning spaces.

Self-Assessment Questions:

List three key contributions that the educational audiologist can offer to educational facility planning teams.

List three classroom acoustics factors that the educational audiologist should consider when educational facilities are scheduled for renovation/remodeling?

POSTER SESSIONS

Electrophysiological Changes in the BioMARK Recording After Auditory Training

Learner Objectives:

Participants will be able to discuss the BioMark recording.

Participants will be able to discuss central auditory plasticity.

Self-Assessment Questions:

What stimulus is used for the BioMark recording?

How can the effectiveness of an auditory training program be assessed?

Classroom Amplification: Response to Intervention and Students with Attentional Issues

Learner Outcomes:

Participants will describe the benefits of classroom amplification for students with attention deficit disorder, with respect to speech perception and listening skills.

Participants will describe methods to demonstrate the effectiveness of classroom amplification for students with attention deficit disorder.

Self-Assessment Questions:

Describe how you can demonstrate the efficacy of classroom amplification for students with attention deficit disorder.

Indicate the auditory skills that can be improved with the use of classroom amplification for the student with attention deficit disorder.

What tools can be used to assess students' attending/listening skills in the classroom?

Inter-aural Timing Differences of Wave V to Click and Speech Stimuli in Children at risk for (C)APD

Learner Outcomes:

Participants will be able to describe the BioMARK recording.

Participants will be able to describe interaural differences.

Self-Assessment Questions:

What stimuli are used for the BioMARK recording?

What hemisphere is dominant for speech processing?

Validation of Team Teaching FM Transmitters

Learner Objectives:

Participants will describe a team teaching arrangement for FM systems and the associated benefits.

Participants will describe how to verify the acoustic similarity of the team teacher microphones for hearing aid and cochlear implant arrangements.

Self-Assessment Questions:

True or False

Network arrangements with FM systems allows for users to receive signals from up to 10 different transmitters.

Electroacoustic verification of team teaching arrangements with a hearing aid includes comparison of the output measured in a 2 cc coupler for presentation of a 65 dB SPL speech-weighted signals to the each microphone.

The Relationship Between the Multiple Auditory Processing Assessment (MAPA) and the Biological Marker of Auditory Processing

Learner Outcomes:

Upon reviewing this poster session learners will be able to:

List and describe the three auditory processing skill areas assessed by the Multiple Auditory Assessment (MAPA).

Describe the BioMAP assessment and describe the type of results one would obtain from the BioMAP.

Discuss how the MAPA and BioMAP may be used to assess the auditory processing skills of a school age child.

Self-Assessment questions:

Which ASHA Consensus Statement Auditory Processing skills are assessed by the MAPA?

What if any relationship exists between performance on the MAPA and the BioMAP?

The Northeast Ohio Consortium for Children with Cochlear Implants

Learner Outcomes:

Attendees will be able to recreate the steps necessary to organize and develop a process to facilitate interagency communication between listed stakeholders.

Attendees will be able to utilize the communication exchange system presented as a springboard for their own needs.

Self-Assessment Questions:

What can be done to improve communication between implant centers, early intervention agencies and schools regarding shared children with cochlear implants?

What information is important to share among agencies to facilitate the advancement of children with cochlear implants and how can this be streamlined?