Components of a Deaf/ Hard of Hearing Program

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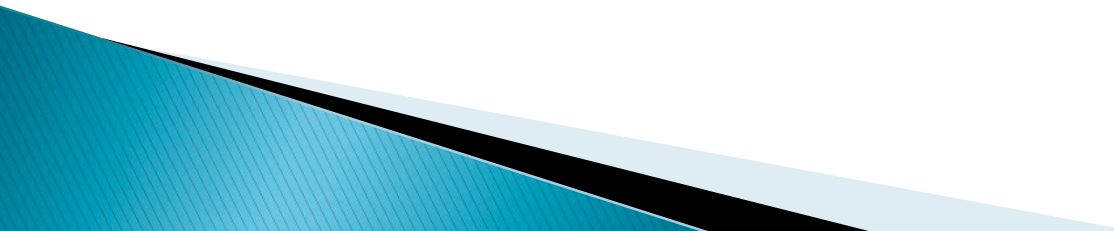Anne Maholm, MA, CCC-SLP

Akron Public Schools

- Our Team:
  - Parents
  - Deaf/Hard of Hearing Intervention Specialists
  - Speech/Language Pathologists
  - Audiologist
  - Audiologist Assistant/Family Support Specialist
  - Supervisor

- Demographics
  - Big 8 Urban District—50 Schools
  - Poverty 78%
  - 8 Deaf/HOH Educational Classrooms

Our Population

- Deaf/Hard of Hearing students ages preschool through grade 12

- Various degrees of hearing loss ranging from mild–profound

- Many with access to technology to facilitate listening and spoken language

- Following the national trend of 30–40% demonstrating additional disabilities

Additional Disabilities In Children With SNHL

No Additional Disabilities 61%

Intellectual Disability 8.3%

Learning Disability 10.7%

ADHD 6.6%

Low Vision 3.8%

Blindness 1.7%

Autism 1.7%

Emotional 1.8%

Gallaudet survey

Communication Continuum

Fully Auditory Communicator	Mostly Auditory Communicator	Mostly Visual Communicator	Fully Visual Communicator

A A_V AV V_A V

* [Adapted source: *AuSpLan* (2003); Modified by M. Koch
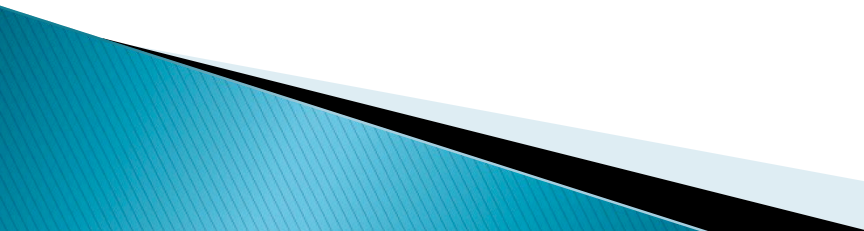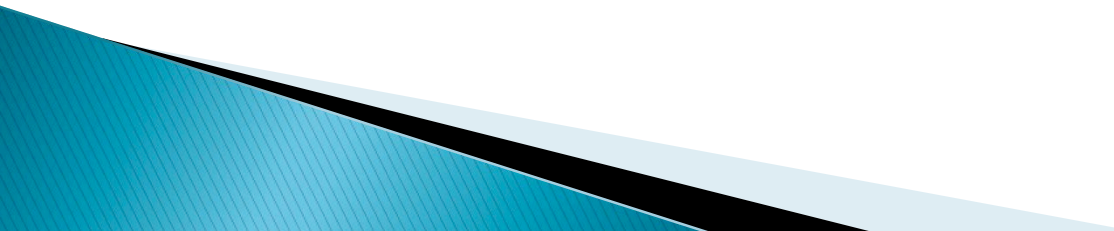
How We Got Here....

- In the past decade, the education of deaf and hard of hearing children has been dramatically impacted by new technology and legislation (Universal Newborn Hearing Screening)
- Babies are now being identified within the first days of life
- Hearing technologies (hearing aids and cochlear implants) are providing better quality sound, allowing access to nearly all the sounds of speech

How We Got Here…

- National statistics → students are graduating with 4th grade reading level

- Addressing national issues related to:
  - Minimal differentiated instruction (academic and auditory learning)
  - Lack of academic success and employment opportunities post graduation
  - Empowering parents in the educational process

What We Needed....

- Guidelines for differentiating instruction for children with varying listening profiles, communication access, and ability levels

- APS contacted Boys Town National Research Hospital to facilitate our change process

Global Areas of Systemic Change

Program Components and Goals:

Component 1: **Auditory Skills Facilitation**
Goal: Implementation of strategies and activities for facilitation of listening in the educational environment.

Component 2:   **Developmentally Appropriate Practices (DAP)**
Goal: Implementation of Developmentally Appropriate Practices in early childhood program.
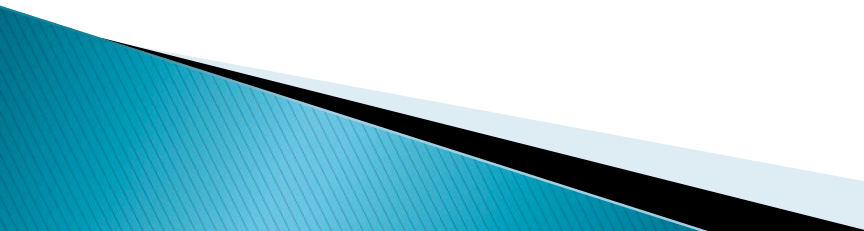
Component 3: **Assessment**
Goal: Establishment of preschool and school-age speech, language, auditory and academic assessment protocols.

Component 4: **Team Formation and Function:**
Goal: Establishment of Deaf/Hard of Hearing team and engagement in team development training.
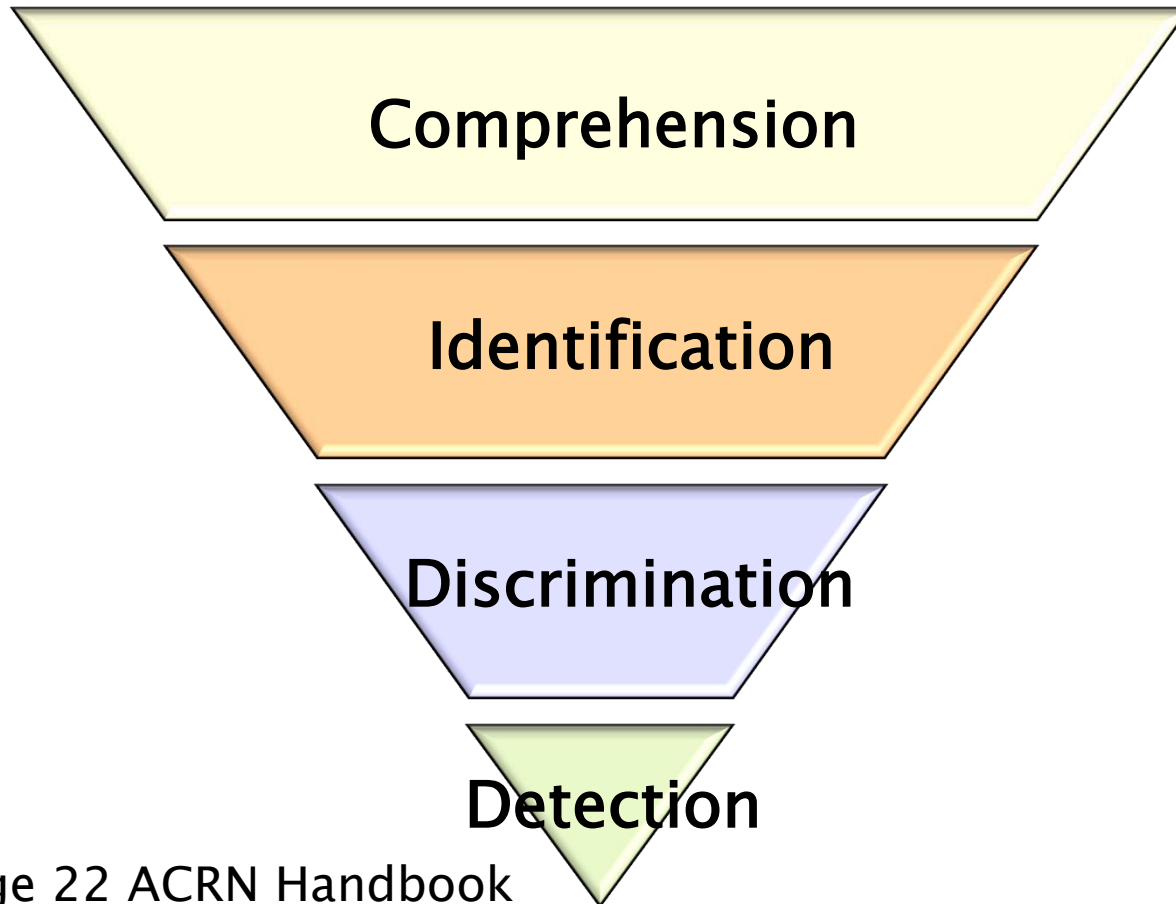
Areas of Program Change

- Hiring practices modified
- Establishing and maintaining family partnership
- Formation of Deaf/HOH Advisory
- Careful evaluation of LRE
- Ongoing professional development
- Communication Profiles
- Speech/Language Assessments
- Audiological Assessments
- Conceptually Accurate Signed English (CASE)

Advanced Technology

Audiological Assessment

Comprehension

Identification

Discrimination

Detection

See Page 22 ACRN Handbook
Erber (1982)

COMPREHENSION

Sequence/Recall:
TAC: Subtest 10:_____
TAC: Subtest 9:_____
TAC: Subtest 8:_____
TAC: Subtest 7:_____

Paragraph Level:
Listening Comprehension Test:_____
CELF – 4: Paragraphs w/o pictures:_____
CASL: Paragraphs w/pic support:_____

Questions:
_____

Other:

AUDITORY MEMORY
ACLC:_____
TAC: Subtest 6:_____
TAC: Subtest 5:_____

IDENTIFICATION

Open Set Sentence Identification:
HINT/HINT-C:_____
BKB:_____
Common Phrases:_____

Other:

Open Set Word Identification:
CNC:_____
PBK-50:_____
LNT – Easy/Hard:_____
MLNT – Easy/Hard:_____

Closed Set Sentence Identification:
Mr. Potato Head Task:_____

Closed Set Pattern Perception:
ESP – LV:_____
TAC: Subtest 3:_____
TAC: Subtest 2:_____

Closed Set Word Identification:
WIPI:_____
NU-Chips:_____
TAC: Subtest 4:_____
ESP - LV/S:_____

DISCRIMINATION
TAC: Subtest 1
Minimal Pairs (i.e./s/v. "sh")
Same/Different Task

DETECTION
Ling 6:_____
Audiogram:_____

Modifications in the Role of the Speech Language Pathologist

▸ Previous responsibilities → School-based SLP

▸ Current responsibilities of D/HOH SLP
  ◦ Current workload
    • Specialized D/HOH SLP's → PreK-5th; 6th-12th
    • intensive training targeting auditory learning methods for working with children using current hearing technology, FM systems and cochlear implants

Communication Profile

Purpose:

▸ To compile background and assessment data on each student in a format that can be used for monitoring progress, identifying needs and developing program goals and placements.
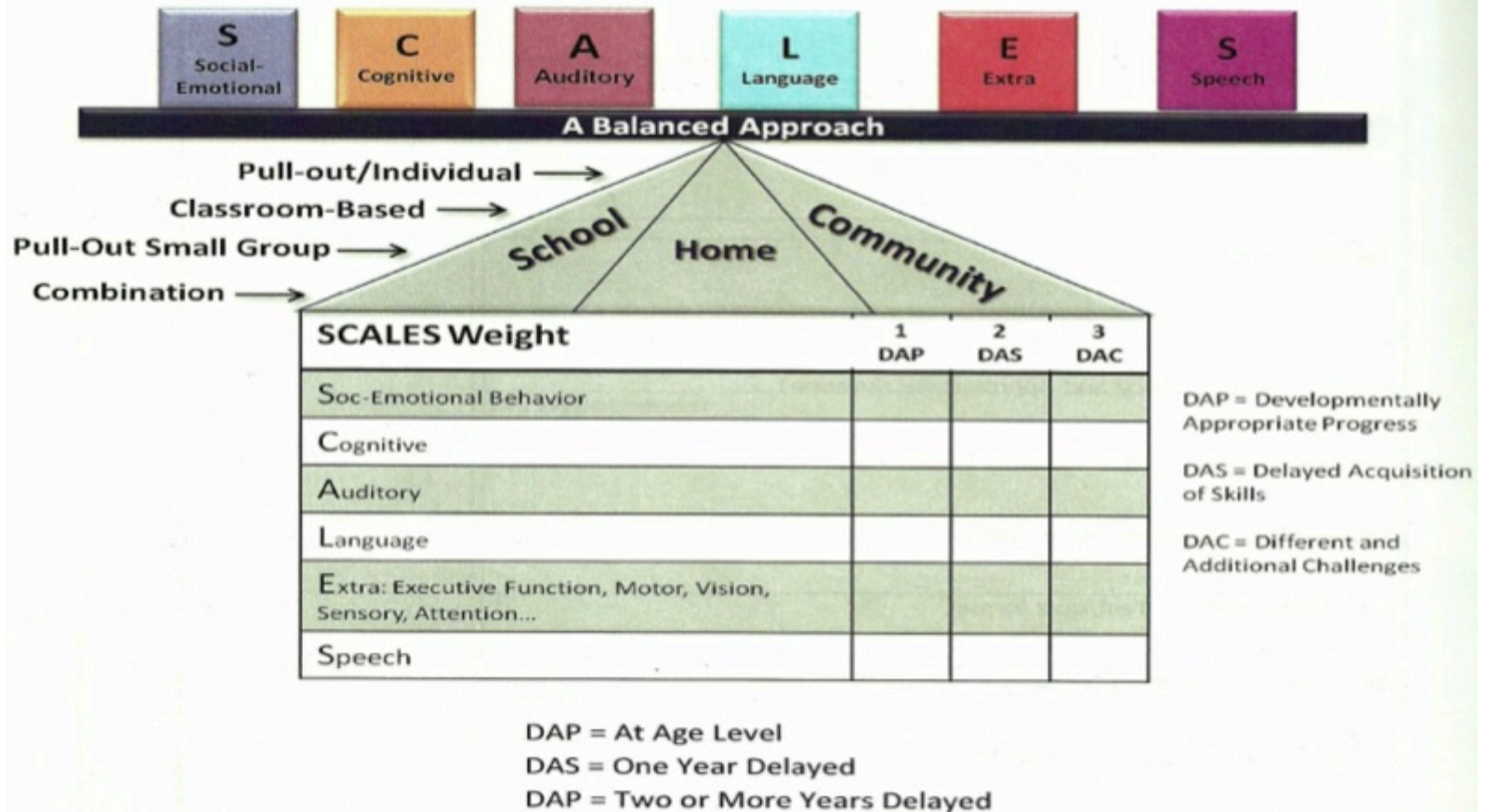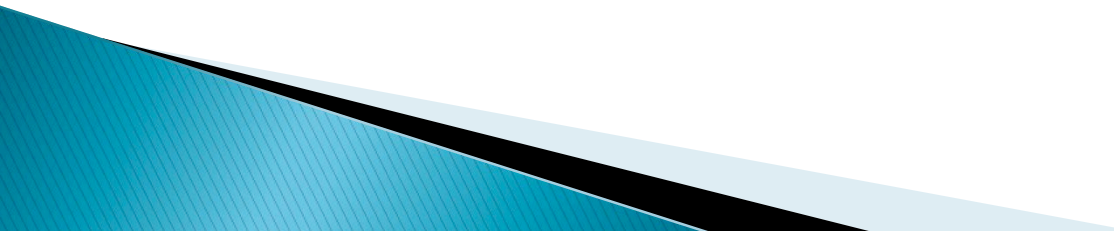
Communication Profile

I. Background Information
II. Hearing Information
III. Educational Services
IV. Communication Expectation and Performance
V. Student Assessments
VI. Student Assessment Profile Summary
VII. Language Sample
VIII. Speech Production: Phonetic Inventory & Phonologic Analysis

A New Approach to Planning

The Scales Model

SCALES Weight	1 DAP	2 DAS	3 DAC
Soc-Emotional Behavior			
Cognitive			
Auditory			
Language			
Extra: Executive Function, Motor, Vision, Sensory, Attention...			
Speech			

DAP = Developmentally Appropriate Progress

DAS = Delayed Acquisition of Skills

DAC = Different and Additional Challenges

Pull-out/Individual →
Classroom-Based →
Pull-Out Small Group →
Combination →

School   Home   Community

A Balanced Approach

S Social-Emotional   C Cognitive   A Auditory   L Language   E Extra   S Speech

DAP = At Age Level
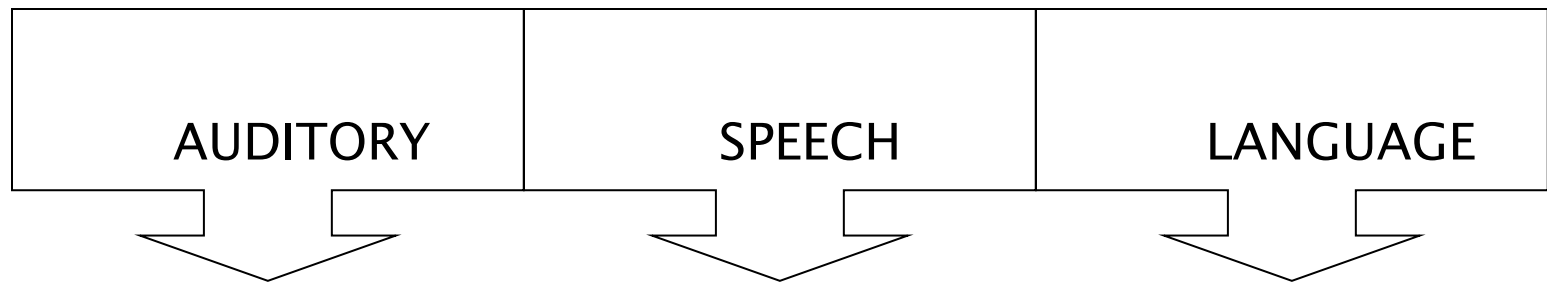DAS = One Year Delayed
DAP = Two or More Years Delayed

Classroom Changes

- Communication between service providers (Audiologist, Teachers and Therapists) is timely and thorough
  - Assessment updates
  - Instructional strategy changes based upon student's skills
  - Review and revise based on new information
  - Classroom description
  - Least Restrictive Environment (LRE)

Deaf/HOH Intervention Specialists

- Collaboration/Planning
  - Completed weekly with teachers & SLP
  - Integrated Specialized Instruction

AUDITORY	SPEECH	LANGUAGE

- Breakfast and Snacks
  - Transitions
- Large Group and Small Group
  - Social Skills and Scripts

Aligning Expectations

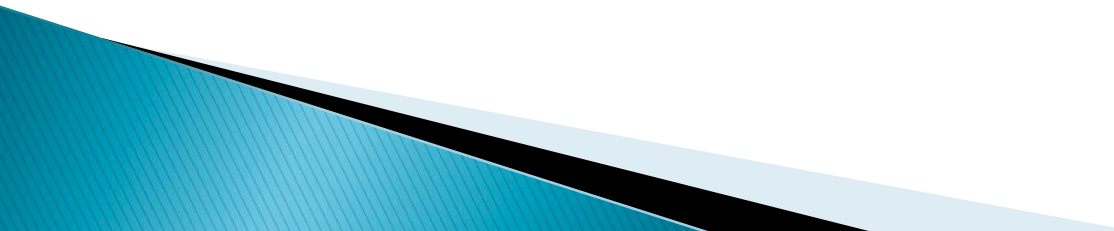|	Understanding of Auditory/Visual Language A = Auditory V = Visual				
EXPECTATIONS	**A**	**Av**	**AV**	**VA**	**V**
• Parents					
• Educational Staff					
• Interpreter					
PERFORMANCE	**A**	**Av**	**AV**	**VA**	**V**
• Home					
• Classroom					
• Interpreter					

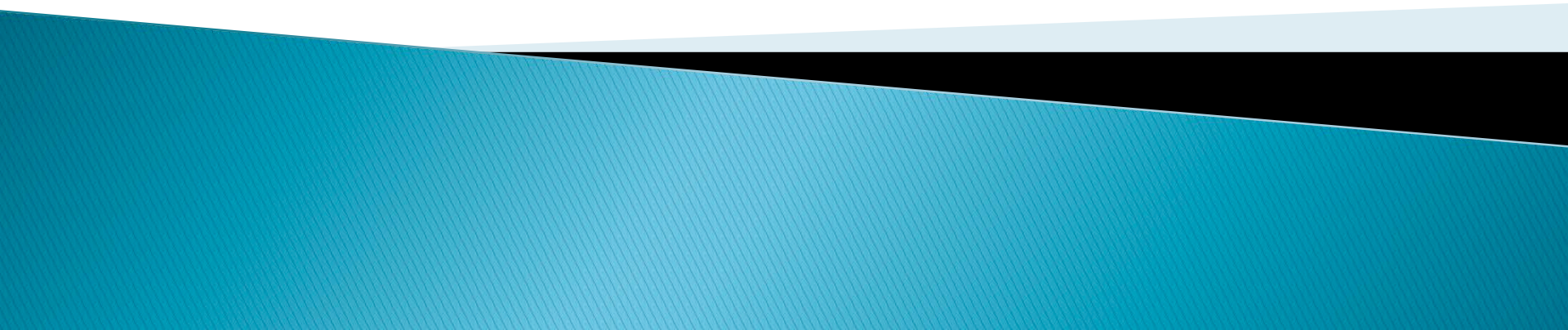|	Use Of Spoken Language and/or Sign O = Oral S = Sign				
EXPECTATIONS	**O**	**Os**	**OS**	**So**	**S**
• Parents					
• Educational Staff					
• Interpreter					
PERFORMANCE	**O**	**Os**	**OS**	**So**	**S**
• Home					
• Classroom					
• Interpreter					

Differentiated Instruction

Family Support Specialist

- Active, ongoing role supporting and collaborating with families, teachers and related service providers to assist in reaching optimal outcomes

- Guiding families of students with hearing loss through the educational process

Sustaining Change

Evidence Based Practice

Auditory-Visual Continuum Practices

PRACTICE	EVIDENCE
Maintain supportive acoustic environments to optimize auditory access.	• Daily listening checks • Background noise minimized • Personal/Classroom Hearing Technology used • Strategic seating • Teacher uses natural rate and volume
Encourage student development and human connections by exploring communication and learning preferences.	• Communication Priority Pyramid • A-V Continuum

Auditory-Visual Continuum Practices

PRACTICE	EVIDENCE
Model capacity-building and help-giving practices with students and families.	• Positive Climate • Responsiveness • Orientation • Sensitivity • Flexibility • Creativity • Friendliness
Guide the family in understanding the student's strengths/needs, exploring/ encouraging communication preferences, identifying expectations, and prioritizing focus areas.	• A-V Continuum • SCALES Model • Performance – Expectations S C A L E S

Auditory-Visual Continuum Practices

PRACTICE	EVIDENCE
Seek whole student perspective with comprehensive assessment across developmental domains to establish goals, plan instruction, and evaluate effectiveness.	• SCALES Model • Assessment & Planning Profile • SCALES IEP • SCALES Lesson Plan
Create communication plans identifying team expectations and strategies to support the student's auditory-visual needs.	• A-V Continuum • Assessment & Planning Profile • Communication Plan • Performance-Expectations • Auditory Planning

Auditory-Visual Continuum Practices

PRACTICE	EVIDENCE
Implement an auditory-visual program model providing highly differentiated instruction in natural environments, classroom settings, and student groupings.	• A-V Continuum • Classroom Matrix • Auditory Planning
Align adults' communication with each student's communication priorities.	• Performance-Expectations • A-V Continuum • Classroom Matrix • Communication Plan • Interpreter Plan

Auditory-Visual Continuum Practices

PRACTICE	EVIDENCE
Provide focused auditory Teaching (FAT) and embedded auditory teaching (EAT) based on the child's auditory goals.	• Auditory Planning, EAT, FAT • Speech Perception Profile • Auditory Skills Profile • Auditory Skills Hierarchy
Utilize a range of auditory and visual strategies during routine interactions and instruction.	• Auditory Planning • Embedded Auditory Teaching • Focused Auditory Teaching • Auditory Chain

Evidence of Differentiated Instruction in the Classroom

▶ Auditory-Visual Continuum Practices
  ◦ Focus (SCALES)
  ◦ Approach
  ◦ Capacity building & Help-giving practices
  ◦ Expectations
  ◦ Auditory Environment
  ◦ Auditory Instruction
  ◦ Communication characteristics

Keys to Success

▸ Monitor Development

▸ **Use Differentiated Models**

▸ Ongoing Systemic Program Analysis and Development