Supporting Learning for Deaf and Hard of Hearing Students

CHERYL DECONDE JOHNSON, ED.D.

THE ADE-VANTAGE CONSULTING WWW.ADEVANTAGE.COM

CHERYL@COLORADO.EDU

Welcome

My Story

Wellness: What is it and How do We Get There

CREATING A WELLNESS PERSPECTIVE

Take Aways…

- Well-being is paramount to student success in school.
- Social competence is primarily learned from experience.
- Peer and adult role models influence the development of identity.
- Self-determination skills increase the probability of greater school success and postschool outcomes.
- Effective use of coaching strategies leads to greater self-determination abilities in students.

Deaf model from Starbuck's commercial: 'Life waits for no one'

Written by Ellie Parfitt on October 5, 2017. Posted in Blog, Entertainment & Arts, Hearo

"Life Waits for No One"

https://www.hearinglikeme.com/deaf-model-in-starbucks-commercial/

"It was my determination and persistence to succeed that got me through…"

School Focus on Wellness

- Whole-child bringing together health, academics, and social-emotional education
- GOAL: counseling support will result in greater acceptance of hearing status and ability to manage communication related accommodations including self-determination and self-advocacy
- Social-emotional learning education = more school-based counseling resources
- Are we prepared to provide counseling support to promote wellness?

Social-Emotional Learning (SEL) Competency Clusters*

*Collaborative for Academic, Social, and Emotional Learning (CASEL) www.casel.org

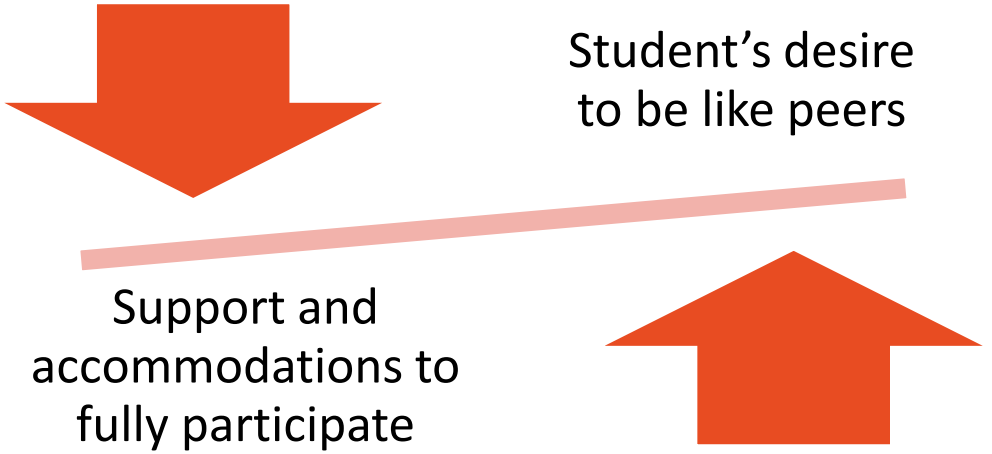
Think about….

Well-being is individualized.

What does it mean to deaf and hard of hearing students?

How does the "desire to be normal", impact our students' relationships, education, participation?

Is it different for different hearing levels? Communication modalities?



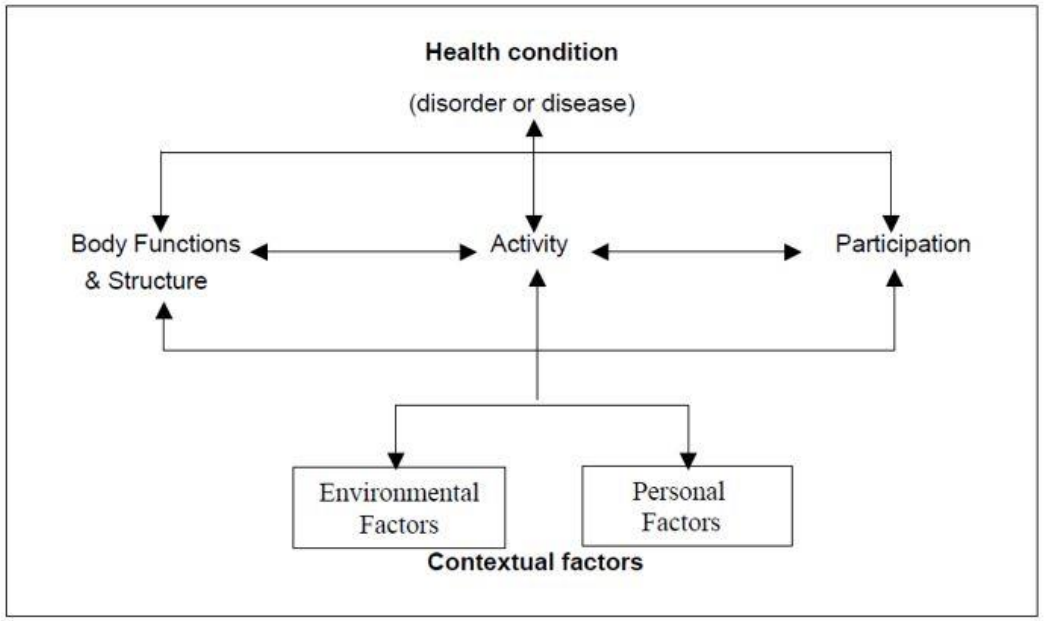
Our challenge as professionals is to balance this desire for normalization with providing the support and accommodations our students need to be accepted and valued and to fully participate, academically and socially with their peers, in the classroom and in extracurricular activities…to be well.

World Health Organization (WHO) (2002)

International classification of Functioning, Disability, and Health (ICF)

Mental health, as a component of wellness is, “a state of well-being in which the individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2018)

Differences (social model) vs Disabilities (medical model)



Body Functions are physiological functions of body systems (including psychological functions).

Body Structures are anatomical parts of the body such as organs, limbs and their components.

Impairments are problems in body function or structure such as a significant deviation or loss.

Activity is the execution of a task or action by an individual.

Participation is involvement in a life situation.

Activity Limitations are difficulties an individual may have in executing activities.

Participation Restrictions are problems an individual may experience in involvement in life situations.

Environmental Factors make up the physical, socal and attitudinal environment in which people live and conduct their lives..

Your turn….

Regarding the WHO ICF classifications, which of the following represent the social model of functioning?

a. Disability is a deficiency that should be ameliorated

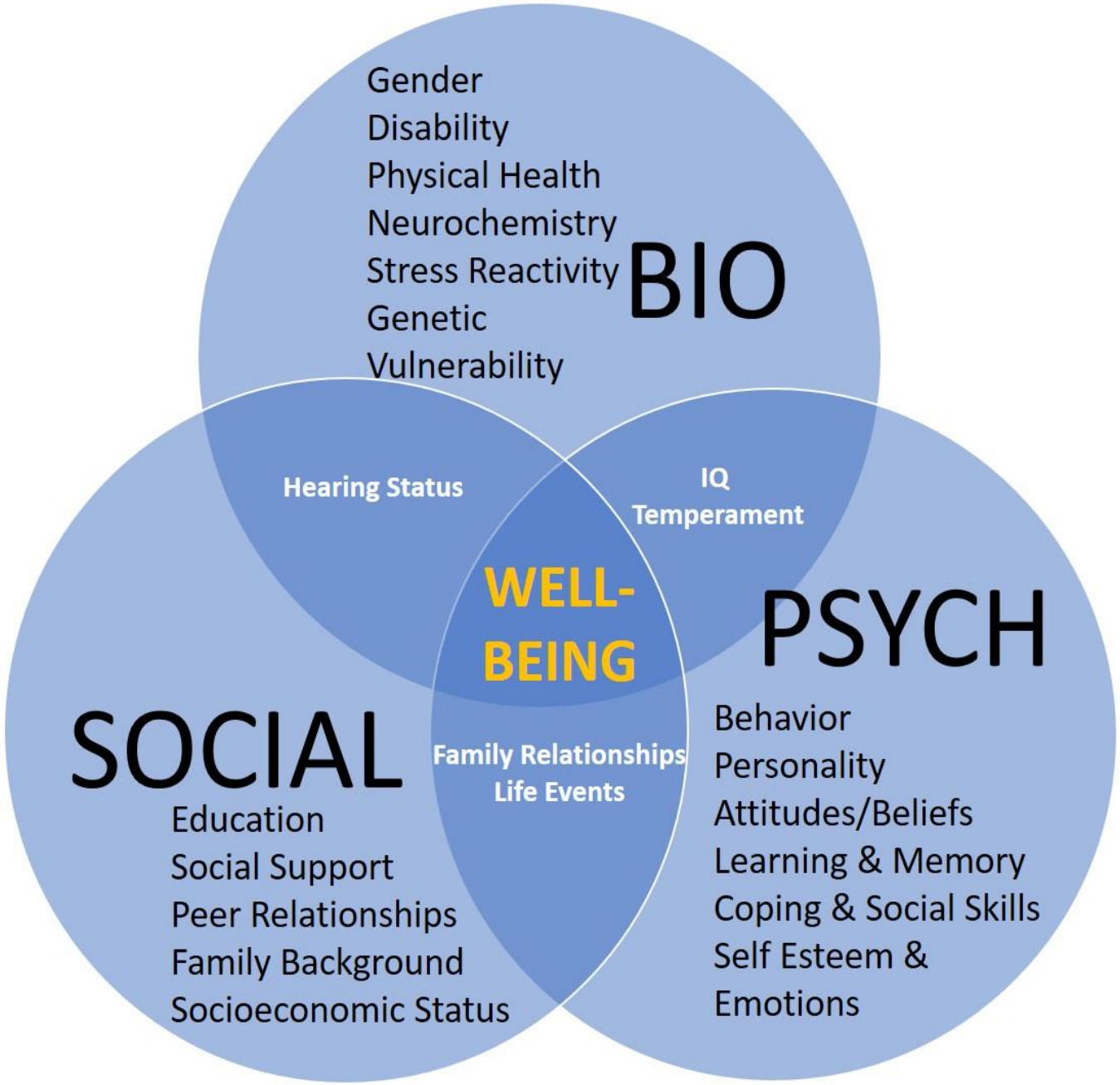
b. Remedy is the individual's problem

c. Disability is a difference

d. Remedy is negotiated with the people with whom the person interacts

e. c & d

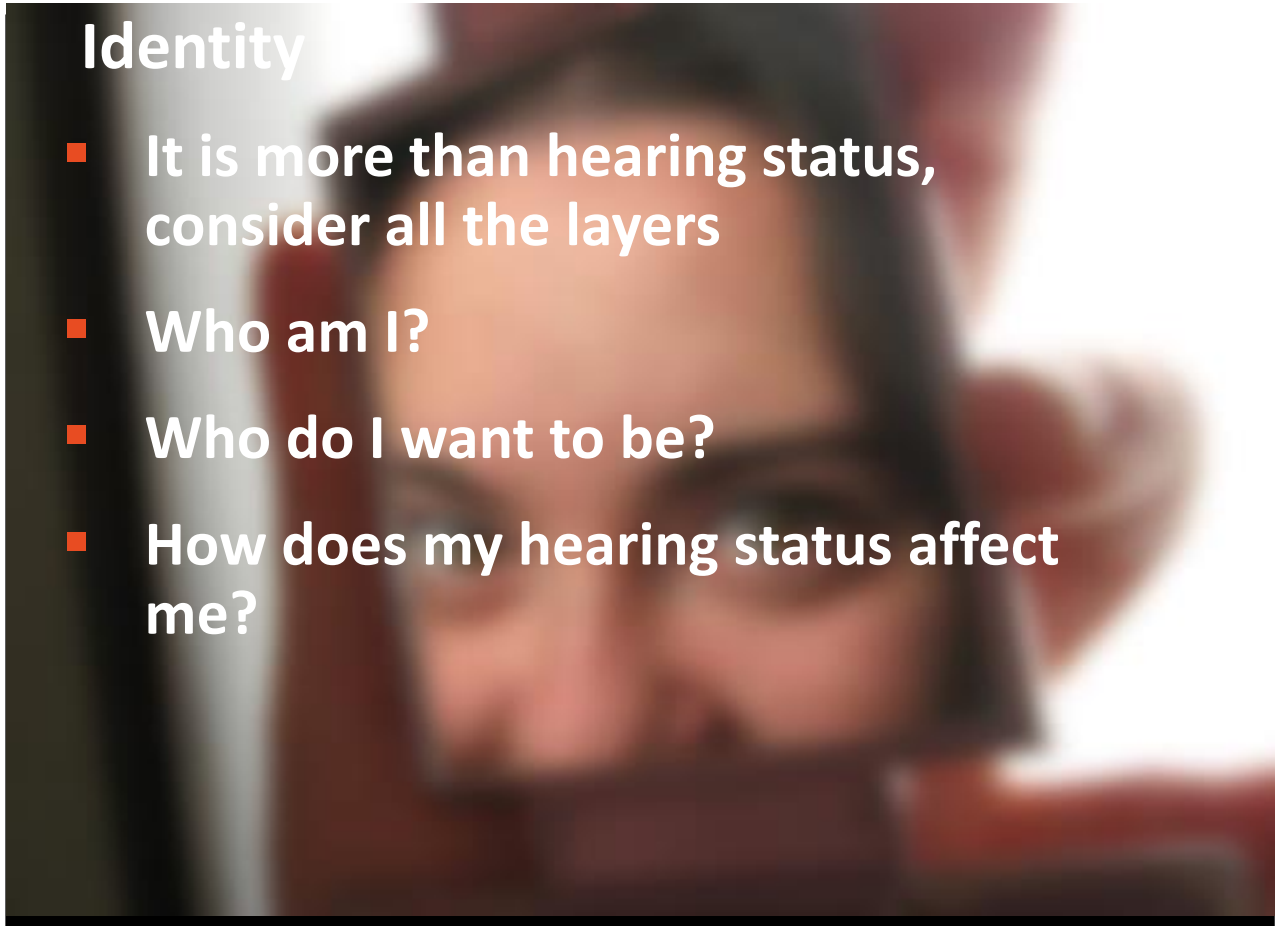
Biopsychosocial Model represents disability as synthesizing the status of the individual's medical, social, and psychological domains.



Social-Emotional Development in DHH Children
(Lytle & Oliva, 2016)

- Social-emotional development promotes language skills, and language skills in turn support social-emotional development.
- Direct communication with numerous adults and peers is important to learning and social-emotional development.
- Deaf and hard of hearing children show gains in self-esteem and self-confidence when they have friends who are also deaf or hard of hearing.
- After-school, weekend, and summer programs with deaf and hard of hearing peers are excellent means for developing friendships and a feeling of belonging.
- Deaf and hard of hearing children are empowered when they are considered part of the overall diversity among students in a school.

Critical Components of Social-Emotional Development



Identity

- **It is more than hearing status, consider all the layers**
- **Who am I?**
- **Who do I want to be?**
- **How does my hearing status affect me?**

Self-Esteem (Cherry, 2019)

- Confidence
- Ability to say no
- Positive outlook
- Ability to see overall strengths and weaknesses and accept them
- Negative experiences do not impact overall perspective
- Ability to express your needs

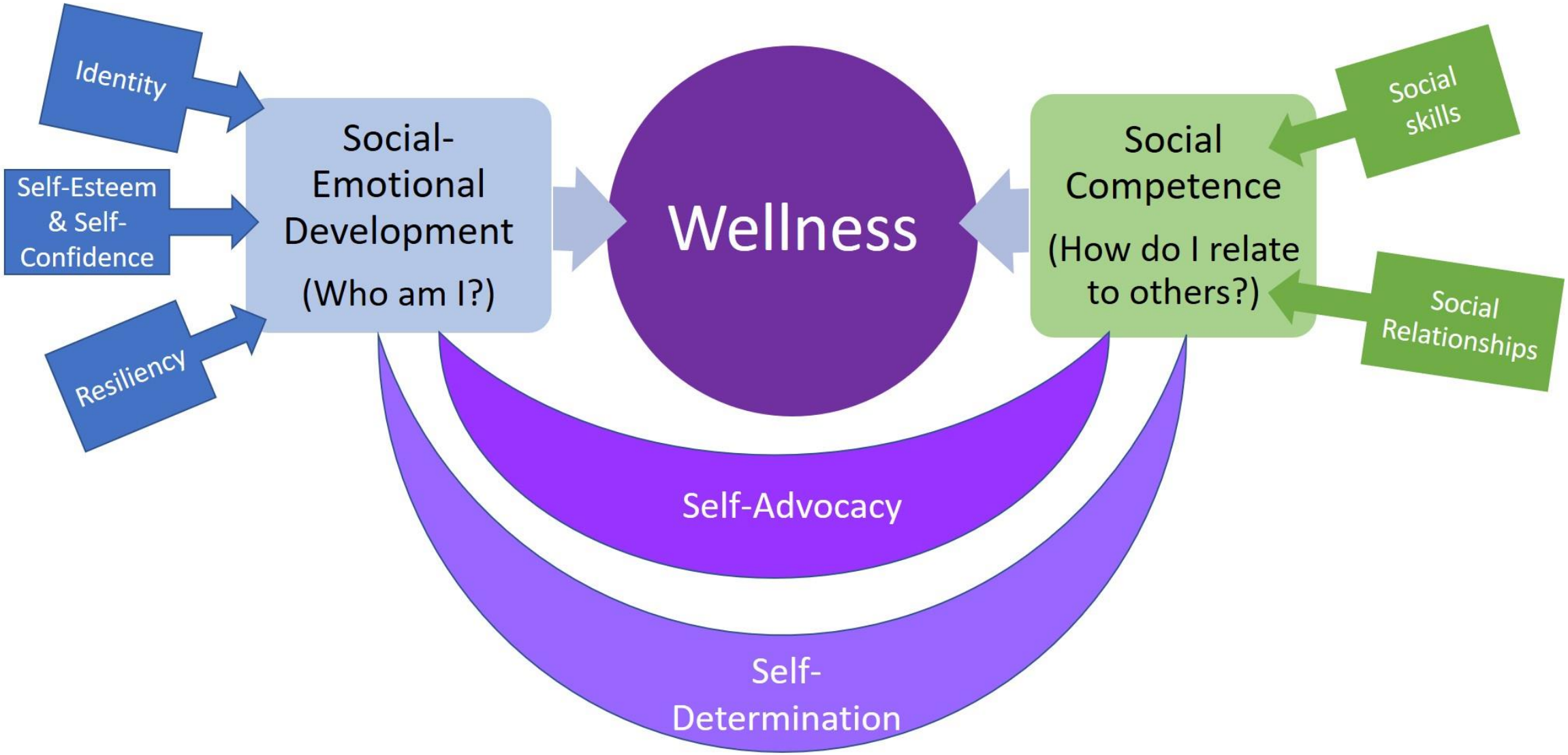
Social-Emotional Development

Resiliency

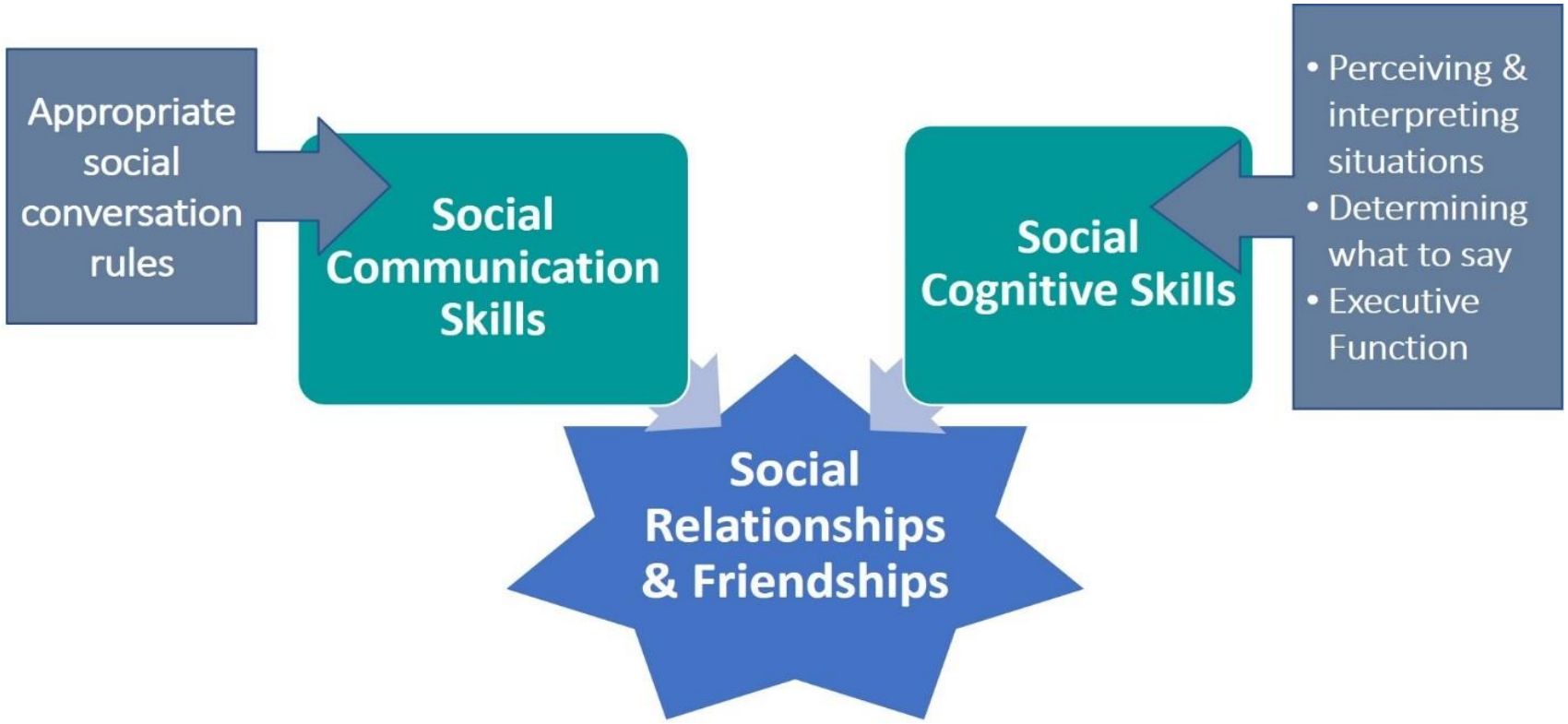
- Process of adaptation when exposed to adverse conditions (Ungar, 2015)
- Fostering Resilience (Bernard, 1991)
  - Social competence
  - Problem solving skills
  - Autonomy
  - Sense of Purpose and Future

Social Competence

- Social skills
- Social relationships


Identity
Self-Esteem & Self-Confidence
Resiliency
Social-Emotional Development
(Who am I?)
Wellness
Social Competence
(How do I relate to others?)
Social skills
Social Relationships
Self-Advocacy
Self-Determination

Social Communication and Social Cognitive Skills



Bullying and Victimization

50% of Deaf/hard of hearing adolescents reported being bullied compare 28% of general education student peers (Warner-Czyz et al)

Bullying aimed at disability may be “disability harassment” under Section 504; law requires schools to address harassment

Recommendations from Warner-Czyz et al:

- Frequent, open communication between parents and teens to build awareness about bullying
- Health care professionals and audiologists should incorporate routine questioning for bullying into protocols
- Refer families for appropriate counseling when situation indicates

Skills and Strategies for Students to Address Wellness & Social Competence

Building Student Skills

Development of Self-Determination: The right to direct one's own life

- Students with SD skills have a stronger chance of being successful in making the transition to adulthood, including employment and independence (Wehmeyer & Schwartz, 1997)

- Study: One year post-graduation, students with higher levels of self-determination in high school were more likely to be living outside the home, employed for pay and earning more per hour than those with lower levels of self-determination.

▪ **Free will** ▪ **Civil and human rights** ▪ **Freedom of choice** ▪ **Independence**	• **Personal agency** • **Self-direction** • **Individual responsibility**

Components of Self-Determination

(University of IL at Chicago National Research & Training Center, 2002)

A more pragmatic definition:
(Martin & Marshall, 1996)

A self-determined person:

- ✓ Sets goals
- ✓ Makes decisions
- ✓ Sees options
- ✓ Solves problems
- ✓ Speaks for oneself
- ✓ Understands what supports are needed for success
- ✓ Knows how to evaluate outcomes

Ryan & Deci 2000

Phase 1: Set a Goal

1. What do I want to learn?
2. What do I know about it now?
3. What must change for me to learn what I don't know?
4. What can I do to make this happen?

Phase 2: Take Action

1. What can I learn from what I don't know?
2. What could keep me from taking action?
3. What can I do to remove these barriers?
4. When will I take action?

Phase 3: Adjust the Goal or Plan

1. What action have I taken?
2. What barriers have been removed?
3. What has changed about what I don't know?
4. Do I know what I want to know?

Self-Determined Learning Model

(Wehmeyer et al, 2000)

Roadblocks to Self-Determination

Roadblocks to Self-Determination

- Difficulty acknowledging and/or accepting a difference
- Unprepared to disclose their disability
- Choose not to disclose
- Wait to disclose AFTER they have significant problems
- Anxious about a "new beginning" and do not want to be labeled

Examples of Failure

- Students who are not supported to use the technology
- Self-advocacy attempts that are thwarted by the teacher
- Parents who deny the need for, or do not support, hearing instrument technology
- School cultures that are not flexible to meet individual needs of students
- Technology that does not work

Strategies to Promote Self-Determination

For Parents

1. Teach parents about the importance of healthy attachment/bonding and effective communication at home.
2. Support them through the feelings associated with grief.
3. Help them understand the impact hearing impairment has on communication—avoid misunderstanding communication difficulties.
4. Provide opportunities for mentoring—encourage relationships with deaf/hard of hearing adults and peers.
5. Discuss "overprotection."
6. Encourage parents to involve their children in
   - setting goals,
   - evaluating options,
   - making choices, and
   - work on achieving goals.

For Children and Youth

General facilitators to self-determination:

- Include the child in positive conversations about their hearing loss.
- Monitor for "complicated" grief in caregivers.
- Support families in developing relationships with other families with children with hearing loss and with deaf/hard of hearing (D/HH) adults and older children (i.e., Hands and Voices; AG Bell)

How do we facilitate Self-Determination?

- Promote the development of self-esteem
- Help children understand their hearing loss
- Promote choice making
- Encourage problem solving
- Develop and understand the process of goal setting and planning
- Support exploration of possibilities
- Evaluating outcomes of choices and problem solving solutions
- Promote reasonable risk taking
- Promote self-advocacy

Your turn….
Self-Advocacy is…

a. The realization of strengths and weaknesses to make decisions
b. Understanding one's challenges and needs
c. The ability to understand and effectively communicate one's needs to other individuals
d. Awareness of environmental and communication barriers.
e. a & c

Networking for Students

IDEA: Special Considerations

- the IEP team consider opportunities for direct communications with peers . . . in the child's language and communication mode."

District, Regional, State School Opportunities

- School visits, field trips, special events, camps

Electronic networking – Facebook and other social media, vlogs/blogs

Professional organization events (AGBell, NAD, Hands & Voices, Phonak's Hearing Like Me)

For Students Coping with their Hearing Status

- Arrange for mentor sessions with adults and/or older students who are deaf or hard of hearing
- Provide written materials and facilitate group discussions about social situations and barriers resulting from reduced hearing
- Maintain and make available files, links, and websites of inspiring stories of children and adults with hearing loss to students
- TODHHs, educational audiologists, SLPs can facilitate the empowerment of students through information and emotional support, but we need to remember that, in the bigger picture, hearing status is only one part of the student's identity.

Peer Mentors and Role Models

- IDEA: “the IEP team consider opportunities for direct communications with peers . . . in the child’s language and communication mode.”
- IEP should include social goals with peers and mentors
- Panel presentations to meet and learn from a variety of deaf and hard of hearing experiences and perspectives is very powerful
- Coordinate district & regionally to connect students and plan events and activities

Positive Social and Interpersonal Skills that Promote Wellness

(VOICE for Hearing Impaired Children and the Canadian Hearing Society)

Thinking independently

Developing self-control

Understanding the feelings, needs, and motivations of oneself and of others

Understanding and expressing a range of emotions

Learning from past experiences in planning for the future

Responding to challenges and obstacles through effective problem-solving

- Recognizing and developing one's strengths through self-actualization
- Self-advocacy
- Effectively navigating diverse social situations
- Managing communication breakdowns
- Maintaining healthy relationships with others.

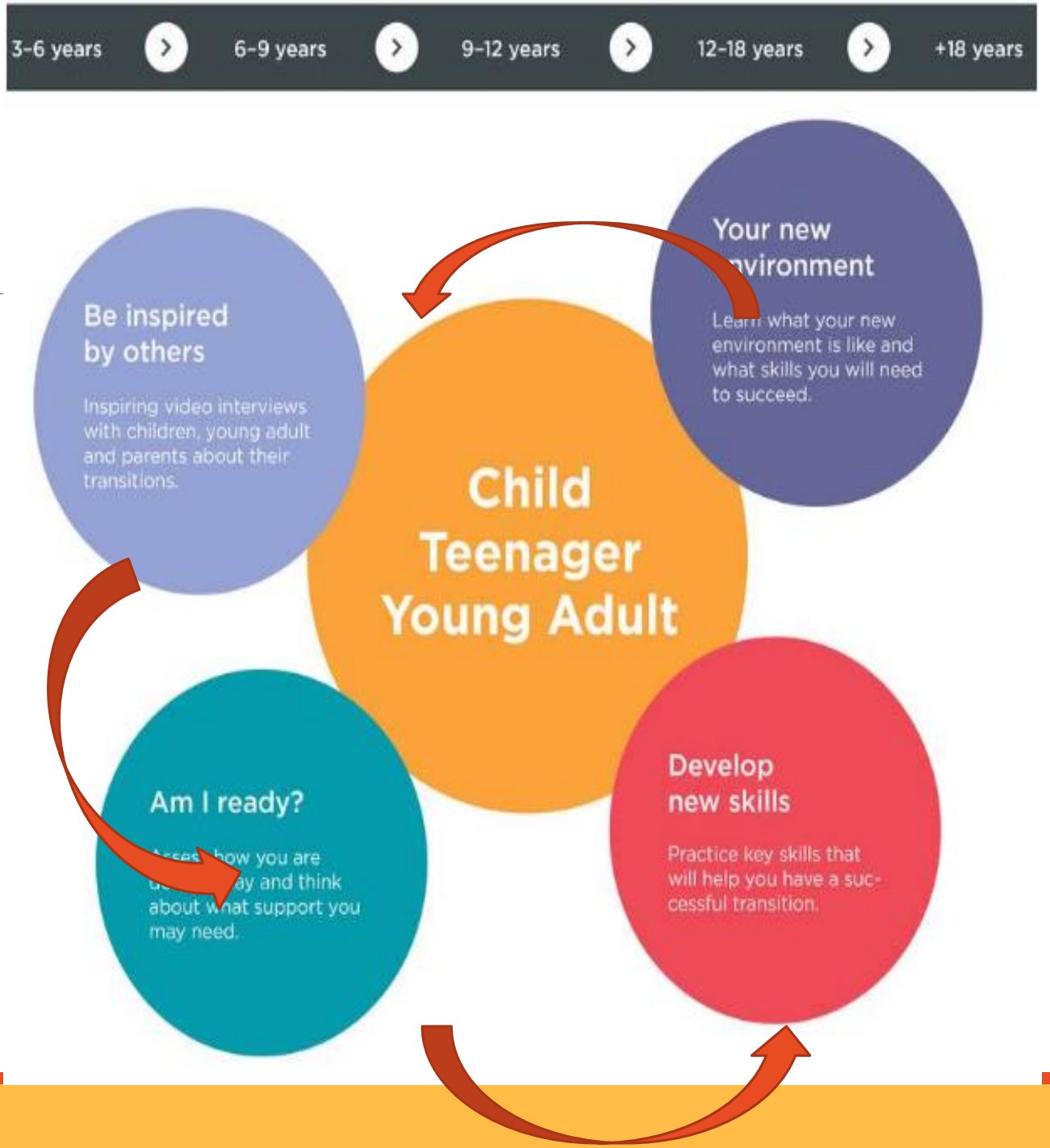
Tools and Protocols for Social Emotional Competence

- Audiology Self-Advocacy Checklists (www.adevantage.com/resources)
- Self-Advocacy resources (successforkidswithhearingloss.com)
- Guide to Access Planning (Phonak)
- Self-Advocacy and Transition Skills for Secondary Students who are Deaf or Hard of Hearing (Price)
- Growing up With Hearing Loss, Living Well for Teens and Tweens, My World (Ida Institute)

Ida Institute: Growing UP with Hearing Loss

https://idainstitute.com/tools/growing_up_with_hearing_loss/

Focus on Wellness



Environment

Simone is a professional ballet dancer who has cochlear implants. In this video, she shares how she learned to speak up for herself in her mainstream school setting.

Simone's Story

Reflect on video:

- What struck you as you watched…
- What role would play?

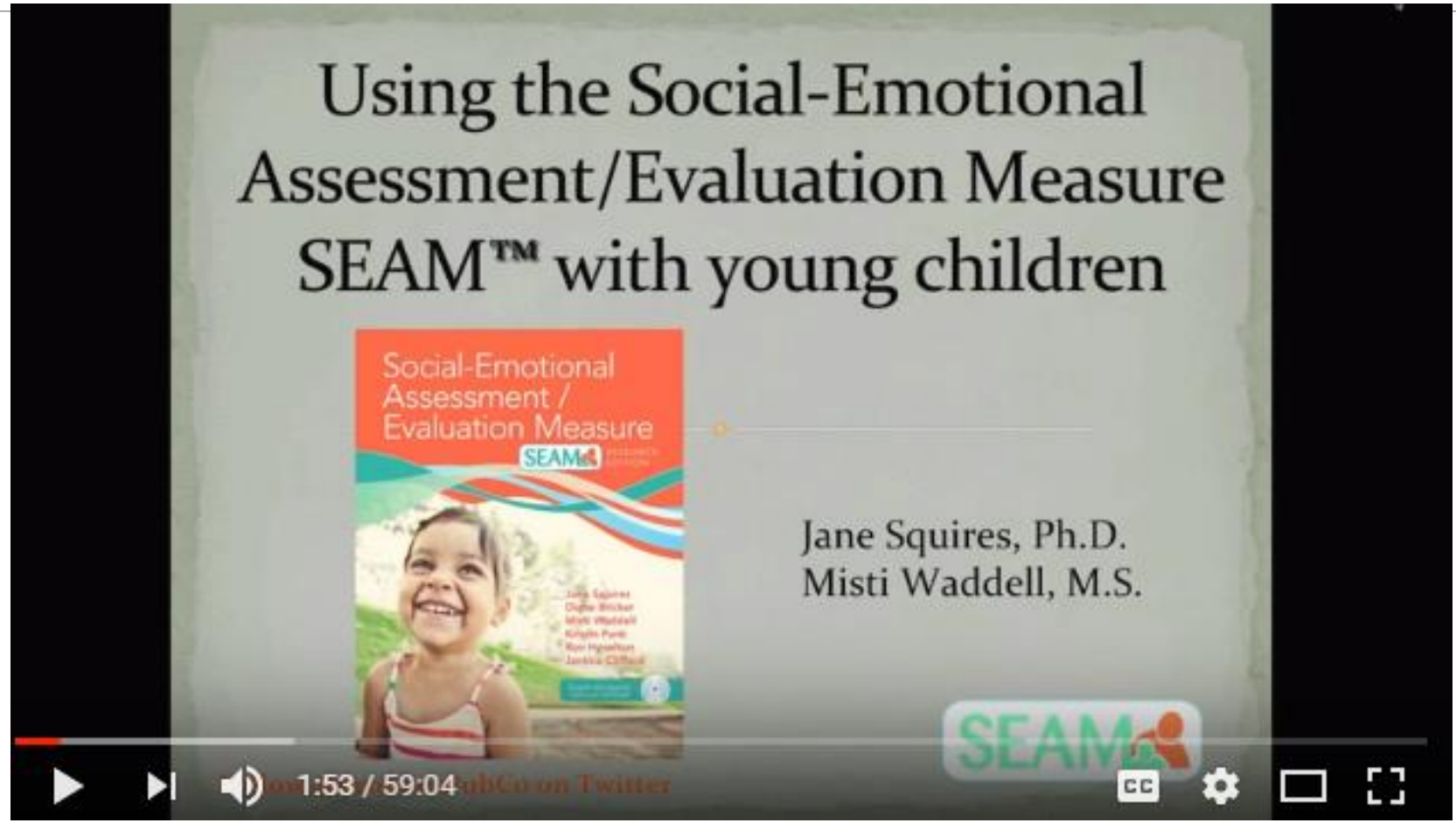
SEAM

The *SEAM™ Tool* – includes three intervals with different developmental ranges: **Infant** (2–18 months), **Toddler** (18–36 months), and **Preschool** (36–66 months) and helps identify a child's strengths, concerns for the family that need monitoring, and agreed-on focus areas.

The *SEAM™ Family Profile* – also has three developmental intervals and assesses parent and caregiver strengths and helps identify areas in which they need more supports and resources to foster their child's social-emotional skills.

SEAM (Brookes Publishing)

http://www.brookespublishing.com/resource-center/screening-and-assessment/seam/



https://www.youtube.com/watch?v=zlp68FHK67Y

SEAM Assesses 10 Child Benchmarks

Child participates in healthy interactions

Child expresses a range of emotions

Child regulates social-emotional responses

Child begins to show empathy for others

Child attends to and engages with others

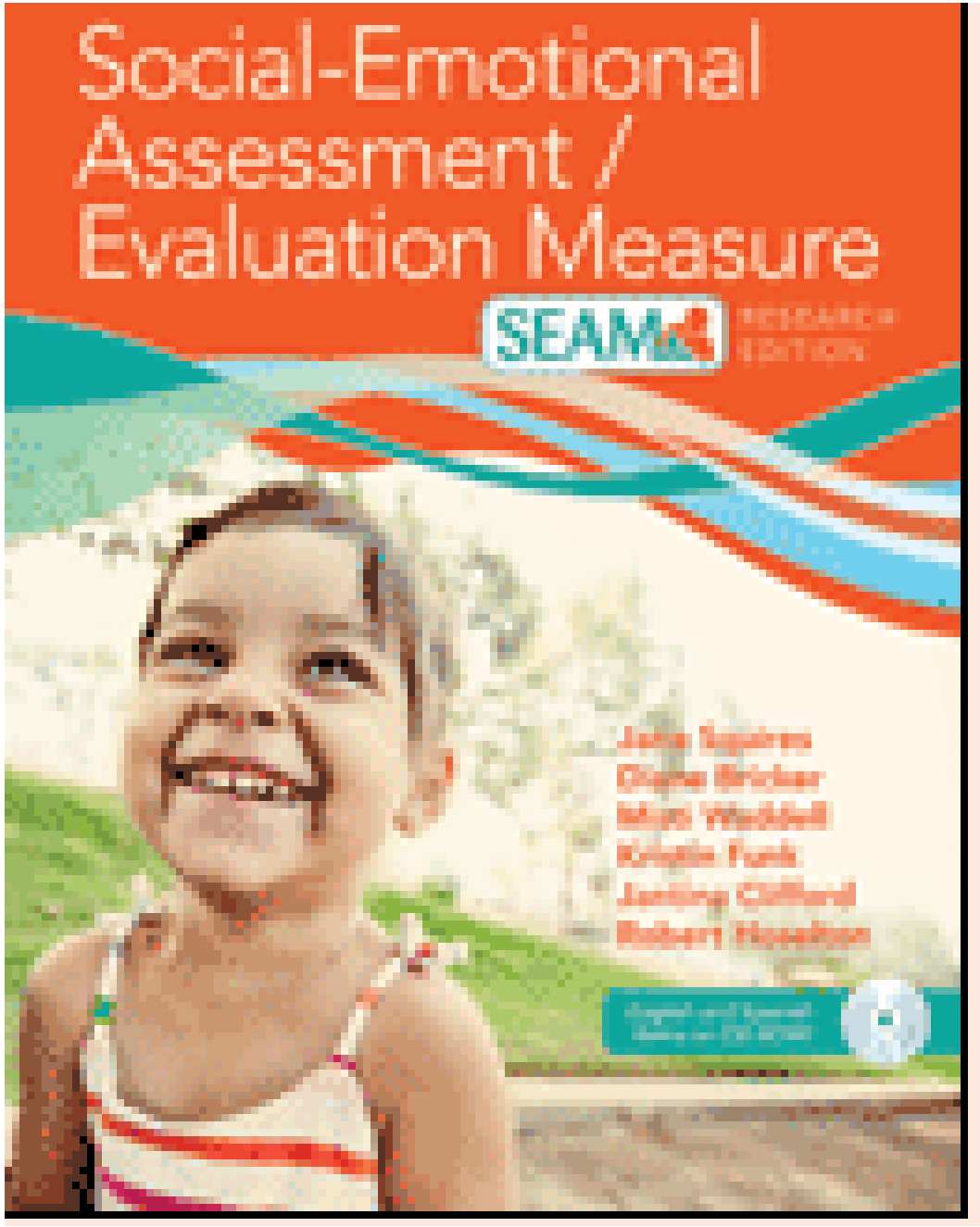
Child explores hands and feet and surroundings (for infants)/demonstrates independence (for toddlers/preschoolers

Child displays a positive self-image

Child regulates activity level

Child cooperates with daily routines and requests

Child shows a range of adaptive skills



Social Skills Improvement System (Gresham & Elliott): **Rating Scales**

Age Range: 3:0 - 18:0

Forms: Parent, Student, Teacher

Other Languages: Spanish

RTI Tiers: RTI Level 2

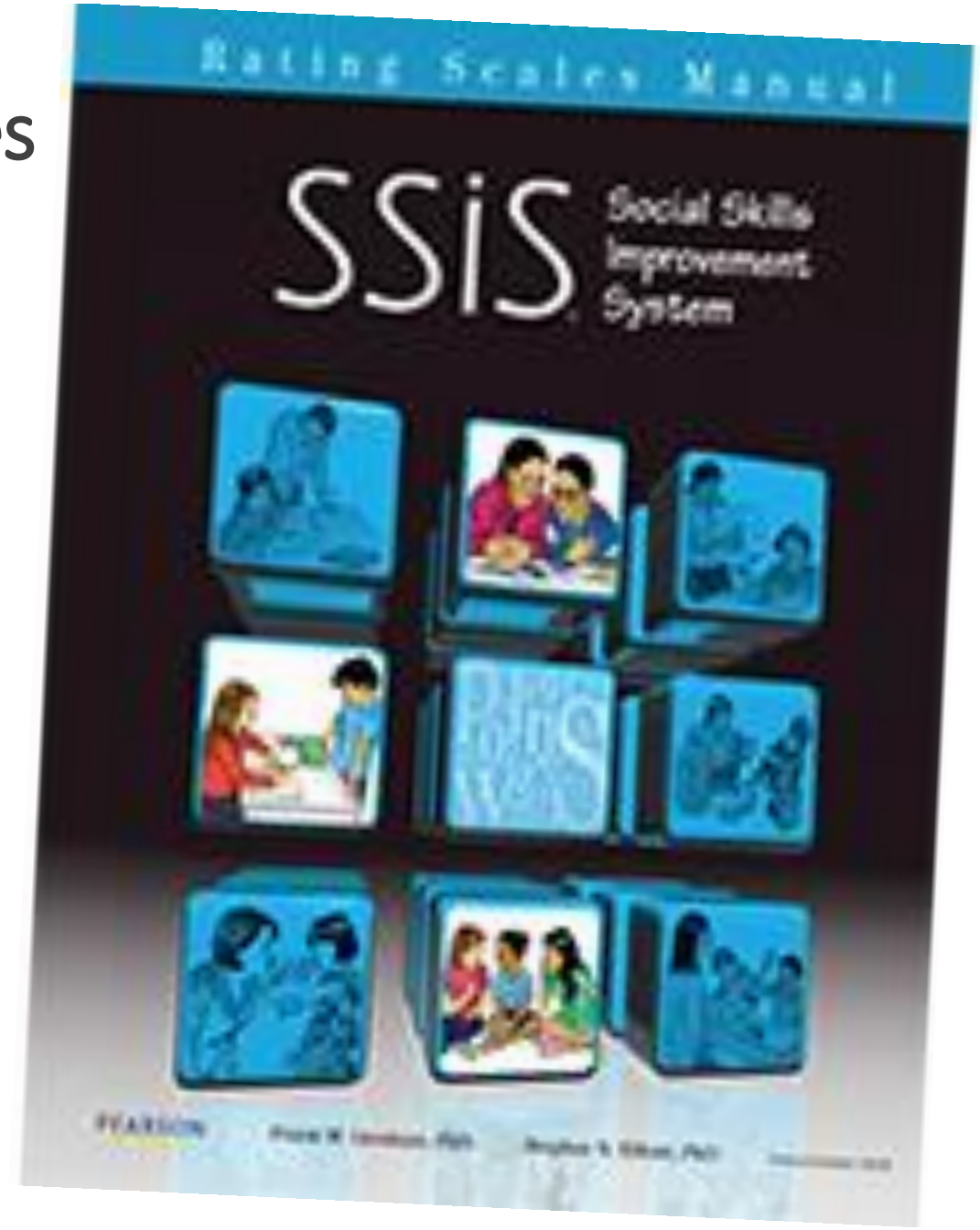
Completion Time: 10-25 minutes

Scores/Interpretation:

- Social Skills
- Problem Behaviors
- Academic Competence scales

Items—Frequency and Importance ratings point to behaviors that may require intervention.

Publication Date: 2008



Social Skills Improvement System

https://www.pearsonclinical.com/education/products/100001940/ssis-social-emotional-learning-edition.html

SSIS Rating Scales Manual

Social Skills Emotional Learning Edition (SSIS SEL)

A comprehensive, evidence-based, social–emotional learning system that also assesses key academic skills and integrates the different components with an aligned, multi-tiered intervention.

Social Skills Intervention Guide (SSIG)

A total of 43 lessons follows a step-by-step teaching model. Skills are grouped around: Cooperation, Assertion, Responsibility, Empathy, Self-control

Social Skills Improvement System Classwide Intervention Program (SSIS-CIP)

A structured, yet flexible and efficient way to teach 10 of the most important social skills to students from preschool to early adolescence.

Success for Kids with Hearing Loss

https://successforkidswithhearingloss.com/for-professionals/self-concept-how-the-child-with-hearing-loss-sees-himself/

- Ten steps to help a child develop a positive self-concept
- Worksheets and other resources
- "I Feel Good!": A Guide to Support the Mental Health and Well-Being of Children and Youth Who Are Deaf/deaf and Hard of Hearing in Ontario's Schools

Maximizing Access to Enhance Student Learning Outcomes

Research to Monitor: School Practices

Outcomes of Children with Hearing Loss (OCHL); Boys Town National Research Hospital (Merry Spratford, Ryan McCreery, Sophie Ambrose) U of Iowa (Elizabeth Walker, Lenore Holte), UNC Chapel Hill https://ochlstudy.org/

- Audibility matters
- Hearing aids, when fit appropriately, matter
- Data logging

Fatigue in Children with Hearing Loss, Fred Bess, Hilary Davis, Benjamin Hornsby, Stephen Camarata (Vanderbilt)
https://my.vanderbilt.edu/listeninglearninglab/current-studies/

- Listening effort and fatigue

Unilateral HL in Children

- Phonak conference (2017) Proceedings
- https://www.phonakpro.com/us/en/training-events/events/past-events/2017/uhl-in-children-conference-philadelphia.html

OCHL: Audibility and Language Development

https://ochlstudy.org/

- Hearing aid use and aided audibility –two variables that account for much of the variation in listening and language outcomes for children who are hard of hearing.
- Steeper language growth in children who wear hearing aids full time and have well-fit hearing aids (mild to severe hearing loss). Same factors also affect word recognition in quiet and in noise.
- Children fit with hearing aids before 6 months were "front loaded" with auditory input early in development showing a more typical language trajectory compared to the later fit kids
- Listening effort - children with hearing loss have to expend more effort while listening, which leads to fatigue. OCHL study is looking at factors influence listening effort, lower level auditory access or higher level language and memory skills.
- Speech recognition testing in quiet does not provide complete picture of how a child will function conversationally, especially in complex listening environments.
- Testing speech recognition using sentences in multi-talker babble will likely align better with child's language than monosyllabic word recognition in quiet.
- Importance of fitting with SII to get aided audibility with at soft (50 dB SPL), conversational (65 dB SPL), and loud (75 dB SPL) levels

Measurement of Listening Fatigue in School-Age Children with Disabilities

https://my.vanderbilt.edu/listeninglearninglab/current-studies/

- Sustained listening demands experienced by children and adults with hearing loss put them at increased risk for severe listening-related fatigue and its resultant negative effects
- As listening effort increases, fatigue increases
- As the listening effort and fatigue of CHL increases throughout the day, their impact on important cognitive abilities (e.g., listening, memorizing, attending) for processing/decoding speech and learning may also increase.
- Phase 3 of study: Questionnaire to measure listening fatigue in children with hearing loss (CHL) and other communication-based disabilities (CHLCD).

Self-Esteem and Self-Advocacy: Implications of Single-Sided Deafness

Johnson, C.D. and Zimmerman, C. (2018). A Case of Missed Opportunities. *Journal of Educational, Pediatric and (Re)habilitative Audiology,* 23.

A Case Study: Implications

Identity as a person

Identity as a person with hearing loss

Without accommodations and support, Kevin's behavior and school performance spiraled

School never recognized hearing loss as a factor; focus on behavior misplaced the support for his challenges

Special Considerations were not applied, FAPE not provided

"An unawareness of the effects that SSD can have on a child's academic performance can lead to a reactive or "failure-based" approach towards intervention. By recognizing the significant effect of Kevin's hearing loss, support and intervention efforts can be proactive and can lead to successful academic and social functioning". (SLP)

Reflections

Identity and social-emotional development considerations are paramount

Counseling at diagnosis and ongoing support

- Prior to and in conjunction with amplification

Peer opportunities for shared experiences and acceptance

Risk Factor approach

- Age of diagnosis
- Age of intervention/ Intervention
- Other birth or developmental issues
- Family situation
- Appropriateness of Assessment – comprehensive, qualified personnnel

Take Aways: Children with Unilateral HL/SSD

Advocacy

Hearing loss is generally physically invisible but behaviorally insidious.

Identity as a person is paramount to well-being; identity as a person with hearing loss with UHL/SSD is unclear but **requires** support and counseling.

Every child is different but all are at risk for same problems as a child with bilateral HL.

We cannot assume that these children are fully accessing their environment, communication, or learning – even with the best hearing technology.

- Or that with access they understand and process what they hear.

There are often a variety of interacting variables. However, the sensory impairment should be given precedence in the evaluation and investigation of a child's behavior and learning abilities **by qualified professionals**.

Learning Environment Considerations

Universal Design for Learning (UDL)

UDL references in ESSA include the following:

- States must assess all students, including offering appropriate accommodations for English language learners and children with disabilities, and, to the extent practical, must develop assessments using the principles of UDL, which intentionally reduce barriers and improve flexibility in how students receive information or demonstrate knowledge requirements.
- States must incorporate the UDL framework into assessments addressing fundamental physical, sensory, and cognitive accessibility requirements for all students.
- States must incorporate UDL principles in Student Support and Academic Enrichment (SSAE) grants: States may use SSAE funds to support local educational agencies in increasing access to personalized, rigorous learning experiences supported by technology. The state's technical assistance should address using technology, consistent with the principles of UDL, to support the learning needs of all students, including children with disabilities and English learners.

Universal Design for Learning (UDL)

Which areas have the greatest relevance for deaf and hard of hearing students?

Seven Basic Principles of UDL (1997, NC State U, Center for Universal Design)

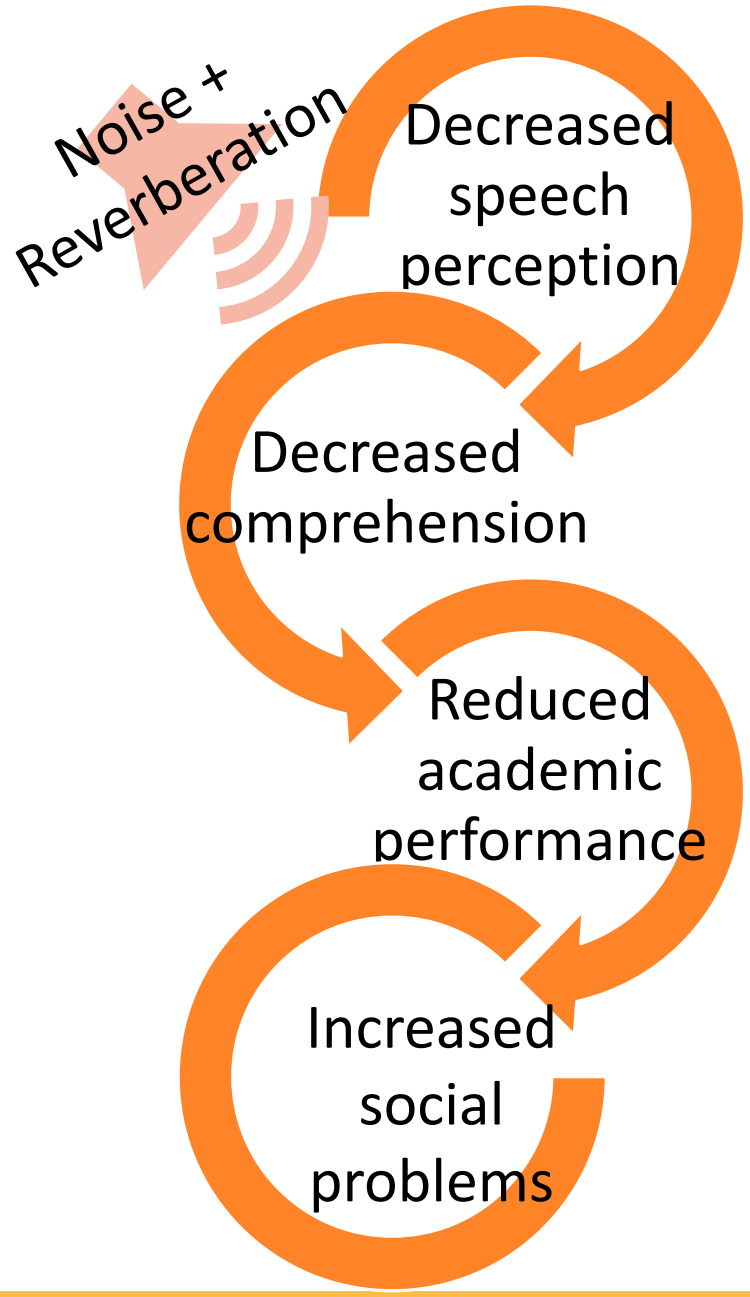
1. Equitable – Make it fair
2. Flexibility in Use – Make it adjustable
3. Simple and Intuitive Use - Make it elegant
4. Perceptible Information – Make it obvious
5. Tolerance for Error – Make it safe
6. Low Physical Effort – Make it gentle
7. Size and Space for Approach and Use – Make it reachable

Learning Environments

Speaking and listening are the primary communication modes in classrooms

- 60-75% of the school day involves listening activities

High noise levels impact reading comprehension, auditory and visual attention, short-term memory, behavior, and social skills in all children.



ANSI/ASA Classroom Acoustics Standards

Recommended Acoustical Standards for Core Learning Space <10,000 ft^3 volume (ANSI/ASA S12.60-2009, 2010):

Permanent Classrooms	Relocatable Classrooms
Ambient Noise Level: 35 dBA	Ambient Noise Level: 35 dBA
Reverberation Time: .6 seconds*	Reverberation Time: .5 seconds*

* Core learning spaces in permanent classrooms shall be readily adaptable to allow reduction in reverberation time to .3 seconds to accommodate children with special listening needs. Relocatable classrooms are generally not suitable for any child with special listening requirements due to higher noise levels.

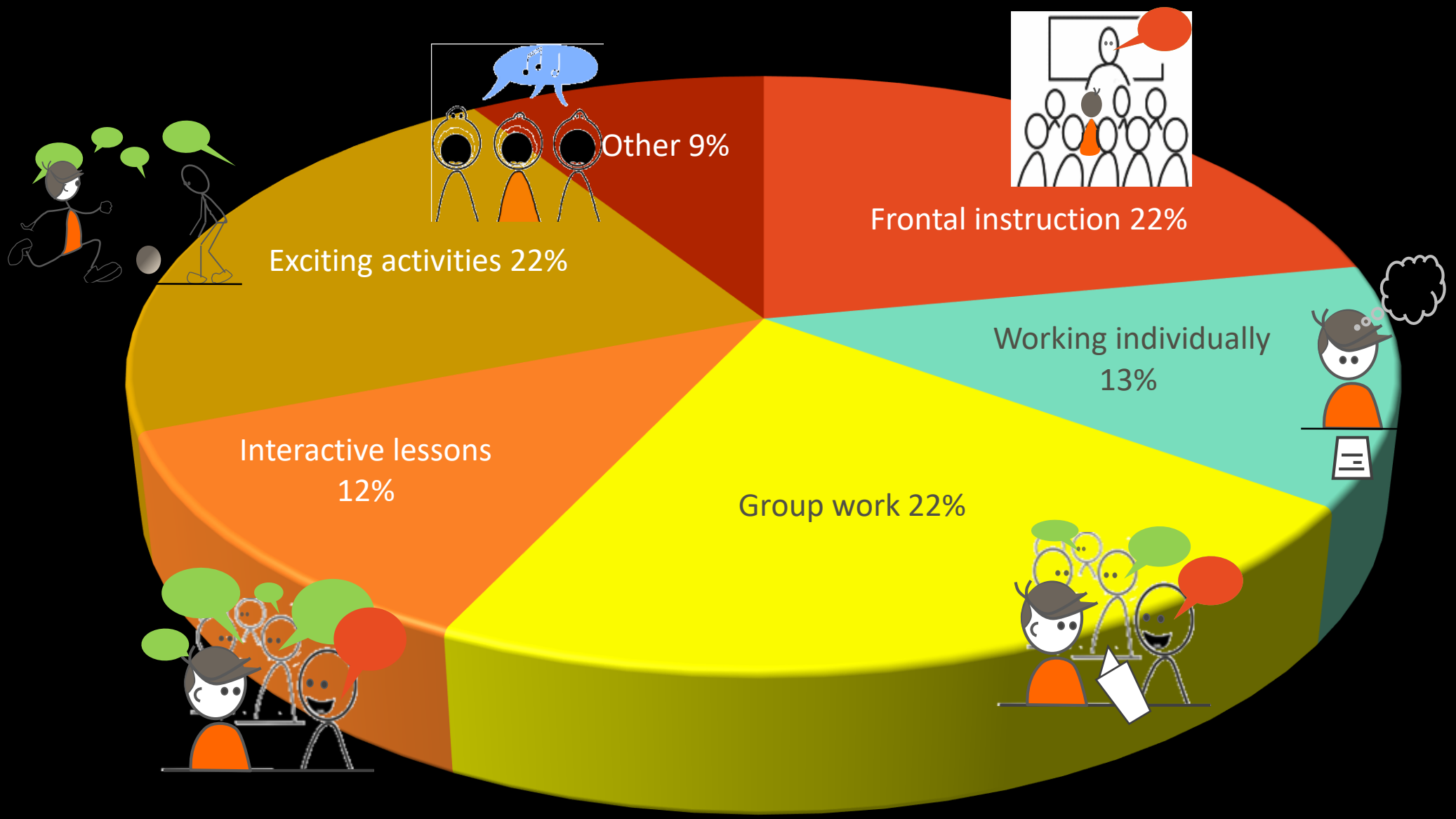
ANSI/ASA Classroom Acoustics Standards for Physical Education (ANSI/ASA S12.60-2019/Part 4):

- Core Learning Space (all sizes) Ambient Noise Level: 40 dBA
- Reverberation Time
  - Enclosed volume <10,000 ft^3: .6 seconds
  - Enclosed volume 10,000 ft^3 - 20,000 ft^3: .8 seconds
  - Enclosed volumes 20,000 ft^3 – 40,000 ft^3: 1.0 seconds
  - Enclosed volumes 40,000 ft^3 – 80,000 ft^3: 1.2 seconds
  - Enclosed volumes 80,000 ft^3 – 160,000 ft^3: 1.4 seconds
  - Enclosed volumes 160,000 ft^3 – 320,000 ft^3: 1.6 seconds
  - Enclosed volumes 320,000 ft^3 – 640,000 ft^3: 1.8 seconds
  - Enclosed volumes > 640,000 ft^3: 2.0 seconds
  - All Ancillary learning spaces NA

Other specifications on revised ANSI standards (2009, 2010)

- Noise level should be based on greatest 1 hour average
- dBA and/or dBC measurements may be used
- Classroom Audio Distribution Systems (CADS) are not a substitute for meeting the acoustical design requirements
- Addresses reduction of exterior noise

Acoustics of a child's school day



Feilner, Rich and Jones (2016) Phonak Insight

Promote Better School Learning Environments

Acoustic Accessibility – Acoustic barriers are often invisible and consequently overlooked

Make school districts and facility planning groups aware of the effects of acoustics in classrooms and the impact on listening and communication

Advocate to improve classroom acoustics and appropriate lighting and visual access

Consult with your educational audiologists; they can:

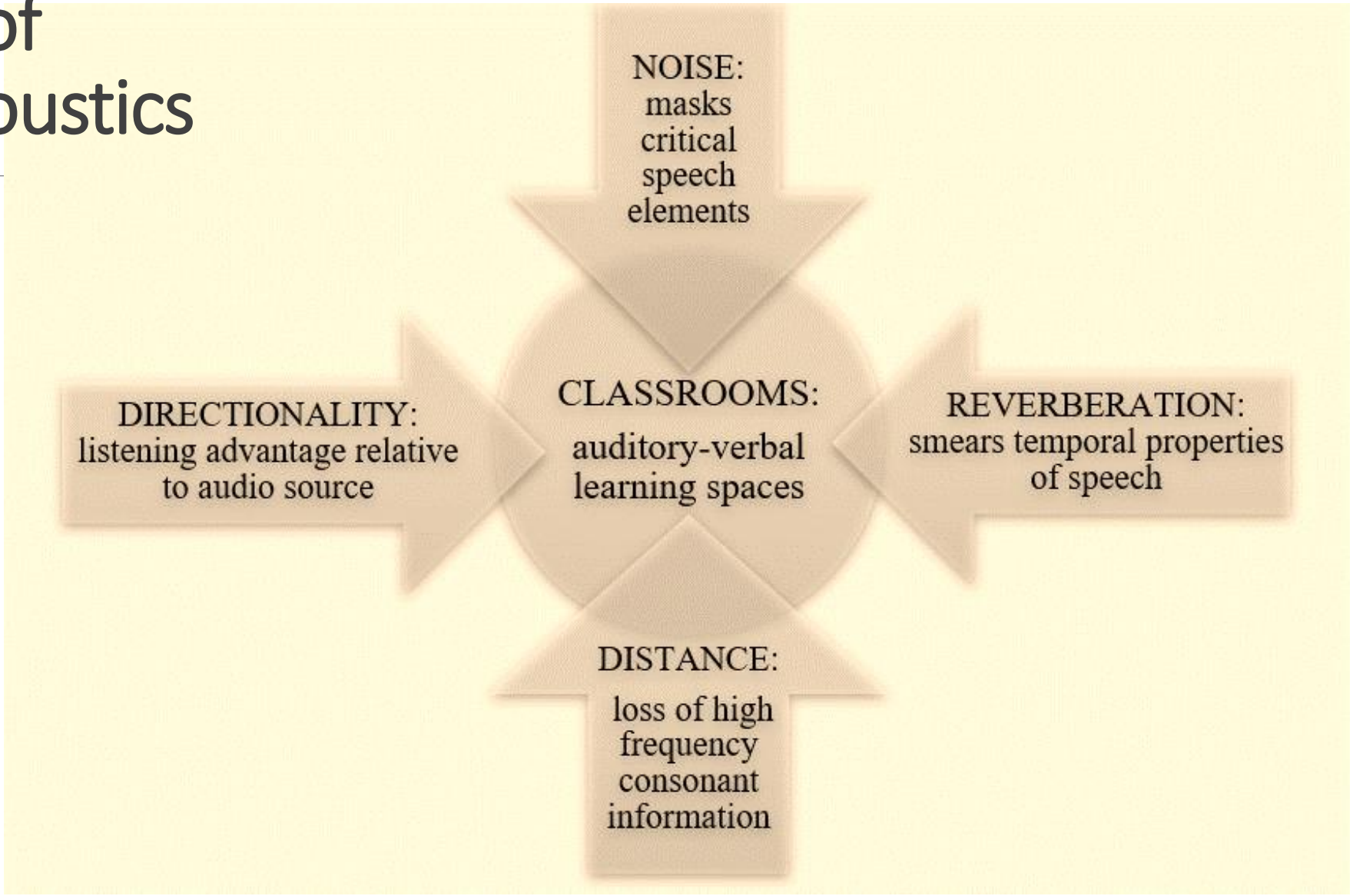
- Provide information about the implications of poor classroom acoustics,
- Advocate for endorsement of the ANSI/ASA classroom acoustics standards
- Perform classroom acoustics measurements

Why Architects Need to Use Their Ears

Ted Talks video

http://www.ted.com/talks/julian_treasure_why_architects_need_to_use_their_ears.html?utm_source=email&source=email&utm_medium=social&utm_campaign=ios-share

Components of Classroom Acoustics



Important Concepts

Background Noise

Reverberation Time

Distance

Critical Distance

Visual Access

Speech to Noise Ratio

Audibility vs Intelligibility

Acoustic Accessibility

This Photo by Unknown Author is licensed under CC BY-SA

Factors that Further Contribute to Listening

External factors

- Barriers in the listening environment
- Clarity and intensity of the audio source

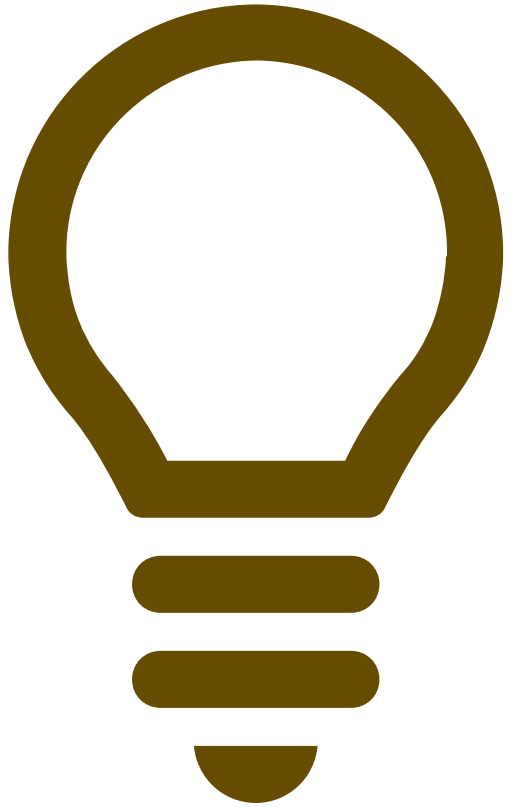
Human factors

- Listener constraints
- Linguistic elements (e.g., familiarity with vocabulary, context, length)
- Articulatory factors (e.g., speaker gender, dialect, speech clarity)
- Auditory attention and memory (e.g., fatigue)

Learning and Lighting Challenges

Studies show that more daylight can increase test performance by 21%

Full spectrum bulbs improve achievement is schools with none or limited daylight



Your turn…

Students in which grades are most vulnerable to the effects of poor classroom acoustics?

a. Preschool

b. Preschool/Elementary

c. Middle school

d. Middle School/High School

WHY?

Theories that support the why:
(Nelson, 2003)

- Inefficient auditory closure
- Immature weighting of acoustic information
- Increased susceptibility to distractors
- Immature ability to segregate concurrent signals from noise

Student, Environment, Tasks, Tools (SETT) Framework

Analysis of the learning environment to identify all factors that lead to various technology accommodations

- Evidence and justification for use based on analysis of each element of SETT
- Training for implementation of technology
- SETT Analysis: SAM

Student	• 5th grade student, average hearing level of 55dB bilaterally resulting in speech barely audible in typical conversation without hearing aids (audibility .05 bilaterally on SII count-the-dot audiogram) and no access in distance listening situations; visual access to talker improves understanding via speech reading. • Hearing aids improve audibility and speech understanding in quiet but distance listening and listening in noise still compromised; Sam describes listening effort and fatigue issues. • Current academic performance is grade level in all areas except reading and written language which are one year behind. • Communication preference is listening-spoken language; however, Sam also knows some ASL from association with other deaf and hard of hearing children at a summer camp. • Sam expressed difficulty hearing and understanding what other students say in the classroom. • Sam is only one in school with reduced hearing levels. There are no reported social – emotional or other concerns.
Environment	• Noise levels of the 5th grade classroom, computer lab, and art classroom exceed ANSI classroom noise standards (standard = 35dBA, classroom range 40-52 dBA). Ventilation system is significant noise source; student computers, smart board add to noise. Computer lab has highest noise levels. • Windows add light but also glare to whiteboard. • Classroom teachers mostly consistent to face Sam when speaking and utilize priority seating, but have difficulty repeating what other students say.
Tasks	• Classroom instruction (large group teacher presentation and discussion, small group activity with discussion) • Independent work assignments • Assessments • Media (videos, utube videos, web content) • Extra-curricular activities: sports

Tools	• GOAL: To achieve at least 90% speech understanding for access to communication and instruction in all classroom settings. Options under consideration:
	  ○ Remote Mic HAT system with pass around mic
	  ○ Sign language interpreter
	  ○ Captioning of media
	• Conduct functional listening assessment to compare performance with and without RM HAT system to validate benefit of 90% performance.
	• Assess ASL benefit by assessing accuracy of understanding a series of signed sentences.
	• Discuss with Sam results of both assessments as well as captioning of media to determine preferred access supports based on the learning and/or communication task.

Student: Sam

- 5th grade student, average hearing level of 55dB bilaterally resulting in speech barely audible in typical conversation without hearing aids (audibility 5% bilaterally on SII count-the-dot audiogram) and no access in distance listening situations; visual access to talker improves understanding via speech reading.
- Hearing aids improve audibility and speech understanding in quiet but distance listening and listening in noise still compromised; Sam describes listening effort and fatigue issues.
- Current academic performance is grade level in all areas except reading and written language which are one year behind.
- Communication preference is listening-spoken language; however, Sam also knows some ASL from association with other deaf and hard of hearing children at a summer camp.
- Sam expressed difficulty hearing and understanding what other students say in the classroom.
- Sam is only student in school with reduced hearing levels. There are no reported social – emotional or other concerns.

Environment

Noise levels of the 5th grade classroom, computer lab, and art classroom exceed ANSI classroom noise standards (standard = 35dBA, classroom range 40-52 dBA). Ventilation system is significant noise source; student computers, smart board add to noise. Computer lab has highest noise levels.

Windows add light but also glare to whiteboard.

Classroom teachers mostly consistent to face Sam when speaking and utilize priority seating, but have difficulty repeating what other students say

Tasks

Classroom instruction (large group teacher presentation and discussion, small group discussion activities)

Independent work assignments

Assessments

Media (videos, utube videos, web content), no captioning

Extra-curricular activities: sports

Tools

GOAL: To achieve at least 90% speech understanding for access to communication and instruction in all classroom settings. Options under consideration:

- Remote Mic HAT system with pass around mic
- Sign language interpreter
- Captioning of media

Conduct functional listening assessment to compare performance with and without RM HAT system to validate benefit of 90% performance.

Assess ASL benefit by assessing accuracy of understanding a series of signed sentences.

Discuss with Sam results of both assessments as well as captioning of media to determine preferred access supports based on the learning and/or communication task

Your turn…

Consider what tools SAM needs to play on his youth basketball team in this SETT analysis.

Student	Sam
Environment	Noisy and reverberant gym Distance from coach varies during play Lighting is adequate
Tasks	Youth basketball league Practice and games Hearing and understanding coach's instruction during drills and games on the court and in the locker room Communication with peers
Tools	

Classroom Accommodations for Auditory Access (NASDSE, 2018)

Select classrooms away from the street, playground, boiler room, and electrical transformers.

Situate the student away from noise-producing equipment such as air conditioners, fans, or computer stations. As an alternative, baffle the vents, mount compressors on rubber pads, or insulate the equipment in some way.

Where possible, situate the student in a classroom with walls and doors. Avoid an open environment such as more than one class sharing the same space.

Shuffling of chairs, coughing, opening/closing of doors, background music, or any environmental sound in the classroom can disrupt a student's attention, interfering with a student's ability to hear and track conversations.

Use remote microphone hearing assistance technology to improve the SNR.

Monitor pacing of information, instruction, and discussion. Students say "I can't hear fast enough" and frequently feel out of step with classroom participation.

Classroom Accommodations for Visual Access (NASDSE, 2018)

Adequate lighting is essential for the students to be able to discern facial expressions, lip movements, signs, body movements, and gestures. Controlled lighting through such strategies as nonglare lighting, curtains, blinds and shades promote visual concentration and reduce eyestrain. Students benefit from solid and uncluttered backgrounds for ease in speechreading and using sign language or cued speech.

Sign language interpreters may require risers in large rooms or special lighting, especially when rooms are darkened for video.

High contrast and large print are necessary for PowerPoint or other text that is projected for classroom instruction.

Visual graphics and pictures are helpful to support English word concepts.

Appropriate signage and other visual displays and message boards provide continual access to daily announcements, critical messages, and other important information.

Classroom Accommodations for Visual Access (NASDSE, 2018)

Flashing fire and smoke alarms are required by ADA and other visual alerting and signaling devices (e.g., flashing lights and bells that begin and end classes) are important to support independence and personal responsibility.

Deaf and hard of hearing students *need* to keep their eyes on the talker, making note-taking extremely challenging (i.e., they cannot simultaneously listen, watch, and write). Request for the student to be provided with teacher notes/slides of the classroom lesson so that they can highlight notes or mark up the slides, while primarily maintaining visual contact with the talker. It also helps students to

- use a computer or notebook to give the student access to Google Slide presentations;
- have a hard copy of the notes (if not a slide presentation) ahead of time; and
- have a fill-in-the-blank style of notes.

Classroom Accommodations for Access to Media (NASDSE, 2018)

Use closed captions (CC) on all video content.

Do not assess your student with recorded speech materials—the student will require a live-voice reader.

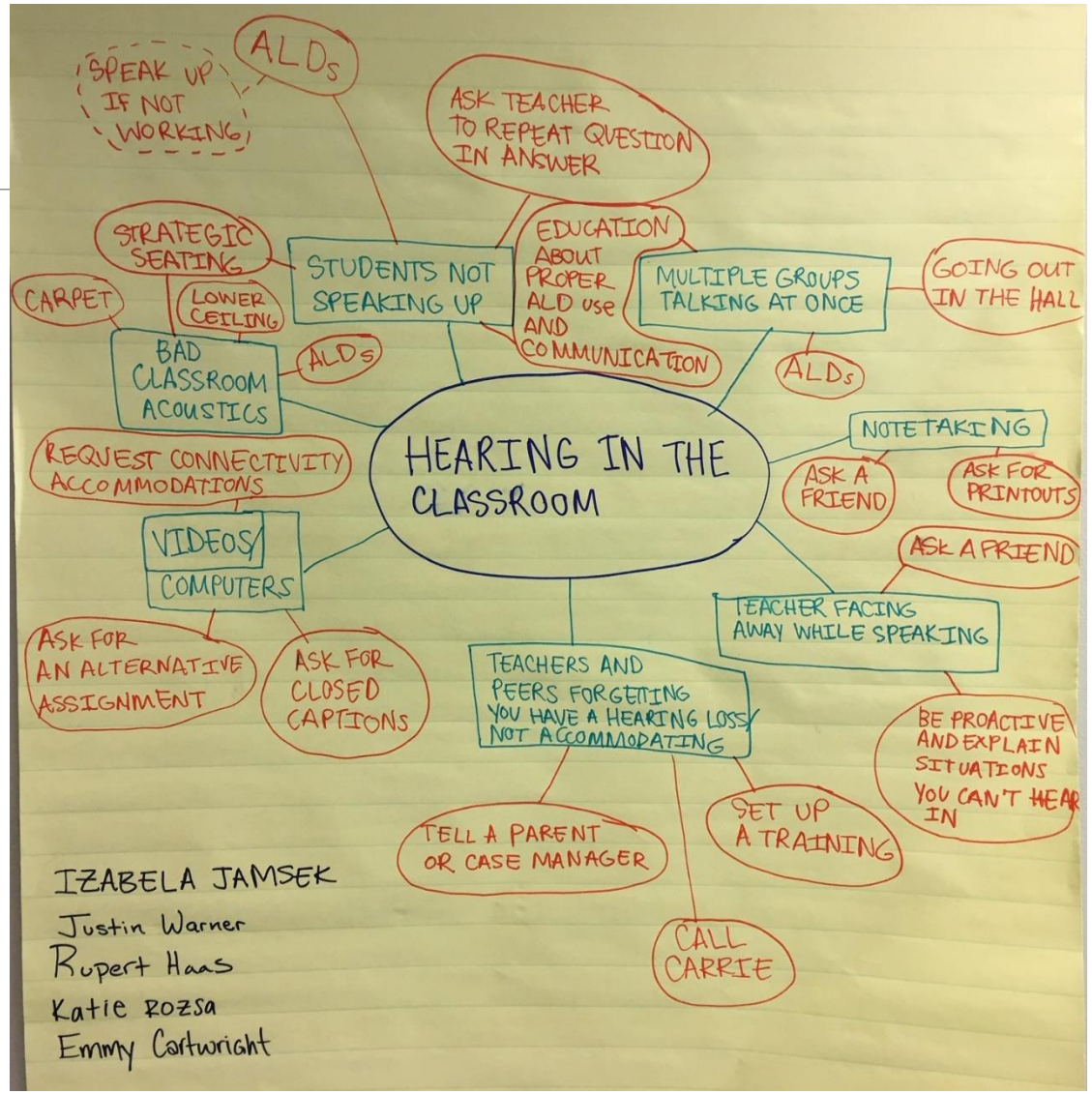
Deaf and hard of hearing students generally cannot use headphones and will require an audio cord to listen to audio media (e.g., iPad, Chromebooks) through their RM system.

Provide video links to your student prior to showing the video in class so that he can rewind and listen again, to what he misheard.

Listening to videos/recorded speech through hearing aids or cochlear implants is much like listening to a Wal-Mart speaker for a typically hearing person—it is fragmented and very difficult to understand.

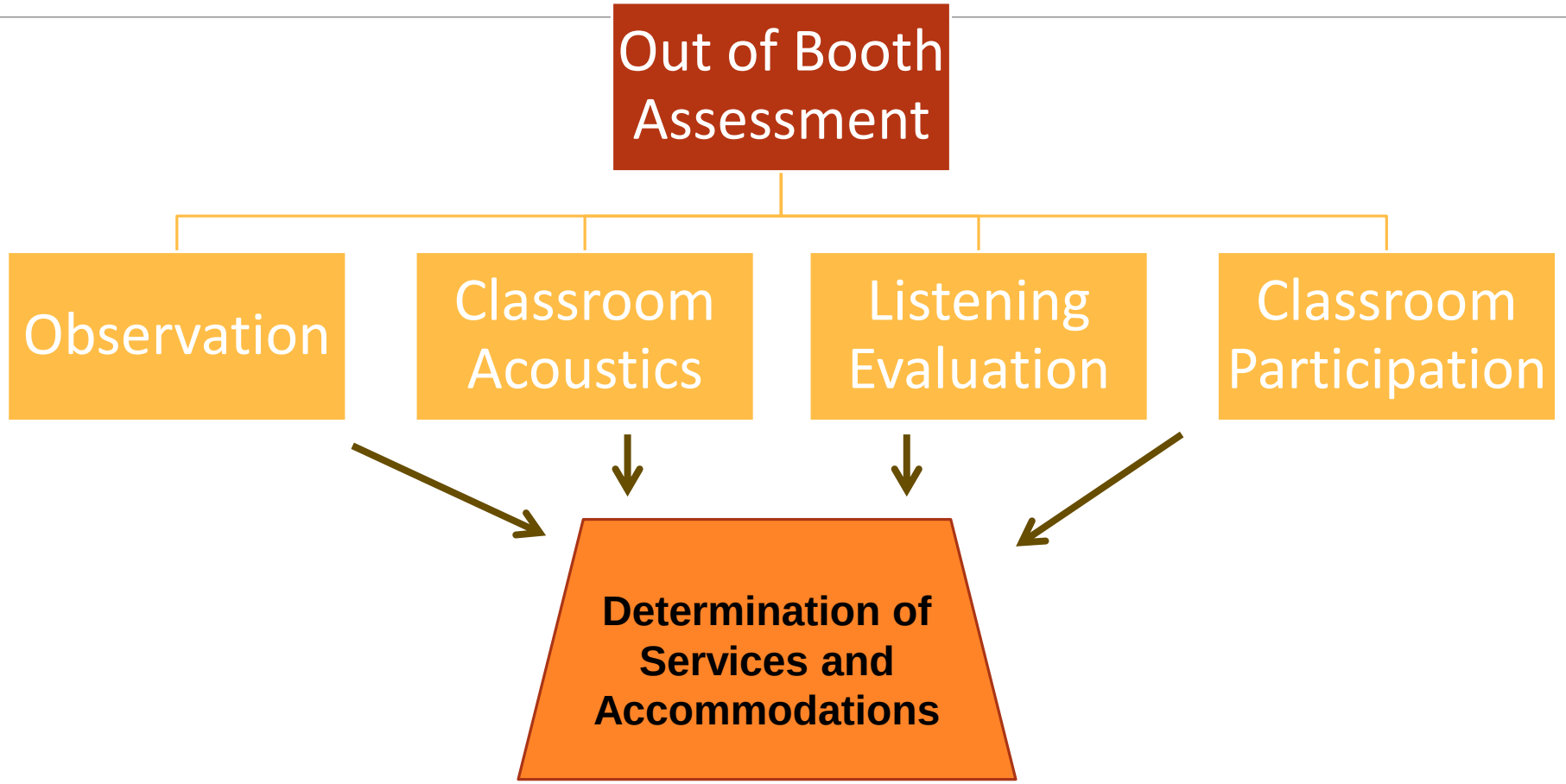
Student Mindmapping Activity

Let students discuss their own communication challenges and identify what they can do to advocate for access



Classroom Listening Assessment

Classroom Listening Assessment



What is the purpose?

To collect and analyze information from a variety of sources: observation, teachers, student

To identify factors affecting classroom listening skills

To identify a student's listening and comprehension ability under various classroom listening conditions

To provide evidence for accommodations (HAT, acoustical treatments, communication strategies) and supports (counseling, HA/HAT orientation and training, teacher in-service)

To improve teacher implementation of recommendations

To evaluate and validate the effects of accommodations and supports on classroom listening

When are assessments completed?

At least annually for every student with reduced hearing on an IEP or 504 Plan

- Why?
  - Classrooms and teachers change
  - Listening skills change
  - Accommodations may need to be modified accordingly

Annually for other students with known listening problems

When listening problems are suspected in other students

Step 1. Classroom Observation

Student information completed by observation

- Teacher's quick-screen of student or review of IEP records
  - C.H.A.P.S. (www.edaud.org)
  - SIFTER (http://successforkidswithhearingloss.com)
- Listening Inventory for Education-Teacher (L.I.F.E.) (http://successforkidswithhearingloss.com)
- PARC Readiness Checklists (www.adevantage.com/resources)
- Other functional assessments

Assessing the classroom

- PARC Placement Checklist (www.adevantage.com/resources)
- Classroom-at-a-Glance (www.adevantage.com/resources)
- Classroom acoustics observation/screening (www.adevantage.com/resources)
- Parent permission not required

Step 2. Classroom Acoustics Measurements

Analyze the listening environment

- Noise
- Reverberation
- Speech to noise ratios
- Critical Distance
- Distribution of speaker's voice throughout the classroom
- Evidence of benefit of classroom audio distribution systems

Variables

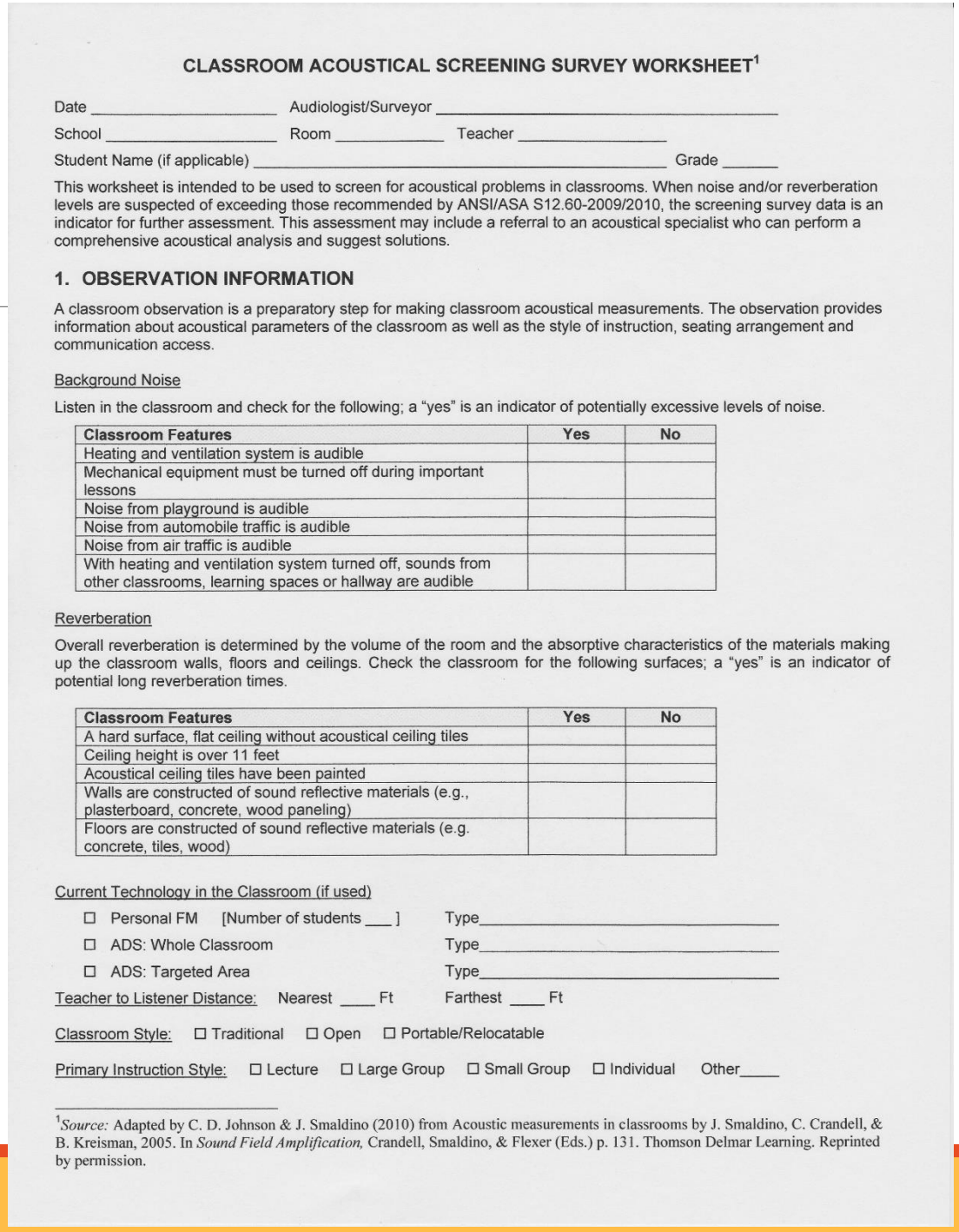
- Noise – SNR, type of noise
- Reverberation
- Distance

Classroom Acoustics Screening Survey

(AAA Clinical Practice Guidelines: Remote Microphone Hearing Assistance Technology for Children and Youth 0-21 Years, Supplement B, Classroom Audio Distribution Systems, 2011)

www.adevantage.com/resources

.



CLASSROOM ACOUSTICAL SCREENING SURVEY WORKSHEET[1]

Date _____ Audiologist/Surveyor _____

School _____ Room _____ Teacher _____

Student Name (if applicable) _____ Grade _____

This worksheet is intended to be used to screen for acoustical problems in classrooms. When noise and/or reverberation levels are suspected of exceeding those recommended by ANSI/ASA S12.60-2009/2010, the screening survey data is an indicator for further assessment. This assessment may include a referral to an acoustical specialist who can perform a comprehensive acoustical analysis and suggest solutions.

1. OBSERVATION INFORMATION

A classroom observation is a preparatory step for making classroom acoustical measurements. The observation provides information about acoustical parameters of the classroom as well as the style of instruction, seating arrangement and communication access.

Background Noise

Listen in the classroom and check for the following; a "yes" is an indicator of potentially excessive levels of noise.

Classroom Features	Yes	No
Heating and ventilation system is audible		
Mechanical equipment must be turned off during important lessons		
Noise from playground is audible		
Noise from automobile traffic is audible		
Noise from air traffic is audible		
With heating and ventilation system turned off, sounds from other classrooms, learning spaces or hallway are audible		

Reverberation

Overall reverberation is determined by the volume of the room and the absorptive characteristics of the materials making up the classroom walls, floors and ceilings. Check the classroom for the following surfaces; a "yes" is an indicator of potential long reverberation times.

Classroom Features	Yes	No
A hard surface, flat ceiling without acoustical ceiling tiles		
Ceiling height is over 11 feet		
Acoustical ceiling tiles have been painted		
Walls are constructed of sound reflective materials (e.g., plasterboard, concrete, wood paneling)		
Floors are constructed of sound reflective materials (e.g. concrete, tiles, wood)		

Current Technology in the Classroom (if used)

☐ Personal FM [Number of students ___] Type_____

☐ ADS: Whole Classroom Type_____

☐ ADS: Targeted Area Type_____

Teacher to Listener Distance: Nearest ____ Ft Farthest ____ Ft

Classroom Style: ☐ Traditional ☐ Open ☐ Portable/Relocatable

Primary Instruction Style: ☐ Lecture ☐ Large Group ☐ Small Group ☐ Individual Other____

[1]*Source:* Adapted by C. D. Johnson & J. Smaldino (2010) from Acoustic measurements in classrooms by J. Smaldino, C. Crandell, & B. Kreisman, 2005. In *Sound Field Amplification,* Crandell, Smaldino, & Flexer (Eds.) p. 131. Thomson Delmar Learning. Reprinted by permission.

Step 3. Functional Listening Evaluation

(Johnson & VonAlmen, 1993, revised 2013)
www.adevantage.com/resouces

Required by IDEA to conduct a *functional evaluation of the child in the child's customary environment*

Compares student's listening ability if a variety of situations to identify effects of noise, distance, and visual cues

Provides authentic sample of student's abilities for teachers, parents, and others

Provides evidence for hearing assistance technology

May support choice of most appropriate hearing assistance technology

Validates benefit of hearing assistance technology

- Does it meet amplification goals for student?

THE FUNCTIONAL LISTENING EVALUATION

Name: AW Date: April 18, 2008 Examiner: MS, Audiologist DOB: October 26, 2000 SCHOOL:

AUDIOMETRIC RESULTS

Hearing Sensitivity: Mild sensorineural loss .5 to 2 kHz right ear & .5 to 1.5 kHz left ear

Pure Tone Ave: Right Ear 30 dB HL Left Ear 20 dB HL

PTA used: √ 500, 1K, 2K ☐ 1K, 2K, 4K

Word Recognition: Right Ear 100% @ 50 dBHL Left Ear 92% @ 40 dBHL

Sound Field: Unaided Quiet 96 % @ 50 dBHL

Noise 88 % @ 50 dBHL @ 0 S/N

Sound Field: With FM Noise 100 % @ 50 dBHL @ 0 S/N

FUNCTIONAL LISTENING EVALUATION CONDITIONS

Amplification: None √ Hearing Aids ☐ FM √ Cochlear Implant ☐ Sound Field ☐ Other_____

Classroom Noise Level: Unoccupied < 50 dBA SPL ; Occupied N/A dBA SPL

Assessment Material: Children's Nonsense Phrases

Distance (distant condition): 12 ft Noise Stimulus: Multitalker √

Speech level at listener's ear: 65 dBA SPL

Speech level @ 1ft from examiner's mouth: 70 dBA SPL

Noise level @ listener's ear: 60 dBA SPL

Approximate speech to noise levels: close +5 dB distant -5 dB

Modifications in protocol: *Completed in standard room at North Delta Public Health Unit as student's customary classroom unavailable. Classroom noise level not measured for this reason.*

FUNCTIONAL LISTENING SCOREBOX

	close/quiet	close/noise	distant/quiet	distant/noise
auditory-visual	1: 95%	3: 85% / 95%	8: 90% / 90%	5: 80% / 95%
auditory	2: 85%	4: 65% / 90%	7: 80% / 100%	6: 35% / 95%

INTERPRETATION MATRIX

Noise

	quiet	noise
close-aud	2: 85	4: 65 / 90
close-aud/vis	1: 95	3: 85 / 95
distant-aud	7: 80 / 100	6: 35 / 95
distant-aud/vis	8: 90 / 90	5: 80 / 95

Distance

	close	distant
quiet-aud	2: 85	7: 80 / 100
quiet-aud-vis	1: 95	8: 90 / 90
noise-aud	4: 65 / 90	6: 35 / 95
noise-aud/vis	3: 85 / 95	5: 80 / 95

Visual Input

	aud-vis	aud
close-quiet	1: 95	2: 85
close-noise	3: 85 / 95	4: 65 / 90
distant-noise	5: 80 / 95	6: 35 / 95
distant-quiet	8: 90 / 90	7: 80 / 100

Average of above scores: 87.5 % quiet; 66.25% noise; 82.5% close; 71.25% distant; 87.5% aud/vis; 66.25% aud

With Hearing Assistance Technology :

Average of above scores: 92.5% quiet; 93.75% noise; 91.25% close; 95% distant; 93.75% aud/vis; 92.5% aud

INTERPRETATION AND RECOMMENDATIONS

Presences of noise and distance from the speaker as well as lack of visual cues all have a significant detrimental effect on AW's speech reception. These are common elements in most classrooms. Use of an FM system significantly reduces these negative effects.

Recommendations :

- *Provide AW with use of an FM system in the classroom*
- *When possible, reduce noise, decrease distance from AW, and provide visual cues in the classroom setting.*
- *Further discussion available on Audiological Report of April 27, 2008.*

Revised 2007 by C.D. Johnson. Based on Functional Listening Evaluation by C.D. Johnson & P. Von Almen, 1993.

Step 4. Classroom Participation

Provides information from the student directly

Self-Assessment Tools

- Classroom Participation Questionnaire (www.adevantage.com/resources)
- Self Assessment of Communication-Adolescent (SAC-A)
- Significant Other Assessment of Communication-Adolescent (SOAC-A) http://successforkidswithhearingloss.com
- Listening Inventory for Education- Student (L.I.F.E.) http://successforkidswithhearingloss.com

Step 5. Using the Assessment Results to Make Authentic Recommendations

Classroom Observation

- General classroom dynamics and learning context
- Teacher's management of communication access
  - Other students
  - Teacher's speech
  - Media
- Individual situational listening ability within that structure (individual vs small group vs whole class)

Classroom Acoustics Measurements

- Recommendation for further assessment
- Evidence for acoustic alterations
- Evidence for accommodations and HA

Subjective and Objective data from Multiple sources:

- Teacher Input
- Student Input
- Assessment

Authentic Recommendations

Functional Listening Evaluation

- Performance data
- Situational effects on listening/understanding
- Evidence for HAT
- Validation of HAT

Classroom Participation Questionnaire/SAC-A & SOAC-A

- Access to communication in the classroom
- Evidence for counseling regarding communication access
- Evidence for self-advocacy/self-efficacy work

A Case Study: IEE Functional Listening Evaluation

Averaged Results: Common Phrases vs Nonsense Phrases

Common Phrases (able to use linguistic knowledge to fill in the blanks)

- Effect of Noise – quiet 99%, noise 96%
- Effect of Distance – close 99%, distant 96%
- Effect of Visual Input – auditory + visual 98%, auditory only 98%

Nonsense Phrases (ability to understand words without topic knowledge)

- Effect of Noise – quiet 74%, noise 51%
- Effect of Distance – close 66%, distant 59%
- Effect of Visual Input – auditory + visual 66%, auditory only 59%

SPEECH UNDERSTANDING NONSENSE PHRASES	Close/quiet	Close/noise Effect of noise	Distant/quiet Effect of distance	Distant/noise Effect of noise + distance
Auditory and visual	70%	65%	75%	50%
Auditory only Effect of loss of visual input	70%	60%	80%	30%

A Case Study: IEE Classroom Participation Questionnaire

Stinson, Long, Reed, Kreimeyer, Sabers, Antia (2006).

Desirable Ratings: 3.5-4.0, Negative Affect 1.0-2.0

Available from www.adevantage.com/resources

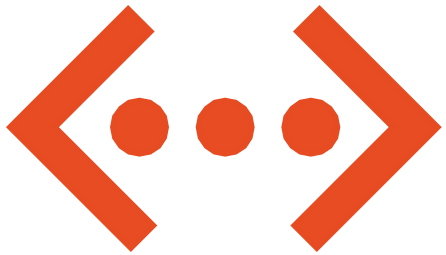
Desirable ratings are in the 3.5-4 range.

1 - Almost Never 2 - Seldom 3 – Often 4 - Almost Always

Subscale	Question Number	Questions	Ratings				
			1	2	3	4	
Understanding Teacher (4)	1	I understand my teacher.			■		
	9	I understand my teacher when she gives me homework assignments.		■			
	10	I understand my teacher when she answers other students' questions.			■		
	11	I understand my teacher when she tells me what to study for a test.			■		
		Mean of the Subtotal	11 / 4 = 2.75				3.25
Understanding Student (4)	2	I understand the other students in class.			■		
	3	I join in class discussions.		■			
	12	I understand other students during group discussions.		■			
	13	I understand other students when they answer my teacher's questions.			■		
		Mean of the Subtotal	14 / 4= 2.5				3.67
Positive Affect (4)	4	I feel good about how I communicate in class.		■			
	8	I feel relaxed when I talk to my teacher.	■				
	14	I feel happy in group discussions in class.	■				
	15	I feel good in group discussions in class.	■				
		Mean of the Subtotal	5 / 4 = 1.25				3.25

Desirable ratings are in the 1-2 range.

Negative Affect (4)	5	I feel frustrated because it is difficult for me to communicate with other students.			■		
	6	I get upset because other students cannot understand me.			■		
	7	I get upset because my teacher cannot understand me.	■				
	16	I feel unhappy in group discussions in class.			■		
		Mean of the Subtotal	10 / 4 = 2.5				1.5



Amplification Technology

IT IS ALL ABOUT AUDIBILITY

Considerations for selection and management:
Remote Microphone HAT Plan (IEP/504)

Device Determination:
Proceed with fitting, verification, & validation based on assessment considerations

Implementation:
When to use
Training for student
Training for teachers and staff

Management:
Monitoring device implementation & function

Goals:
Knowledge
Path to self-advocacy
Peer activities

Technology Features

- Automatic Noise Management
- Remote Microphones are a must
  - Teacher/talker
  - Table placement
- Data Logging
- Independent device management
  - **Hearing Technology Use and Management in School-Age Children: Reports from Data Logs, Parents, and Teachers, JAAA 28:883-892 (2017)**

Technology Summary

Regardless of the technology ….

- Verification and validation are necessary
- Frequent monitoring is necessary
- Teacher training and support is necessary
- Student's buy-in is necessary
  - need to know what the technology does and does not do
  - Students should have a voice and a choice in what they use

Your turn…

Which of the following is not impacted by poor classroom acoustics?

a. Speech perception

b. Teacher voice fatigue

c. Listening effort

d. RM HAT transmission

COVID & Team Collaboration

SCHOOLS DURING THE COVID-19 PANDEMIC

The purpose of this tool is to assist administrators in making (re)opening decisions regarding K-12 schools during the COVID-19 pandemic. It is important to check with state and local health officials and other partners to determine the most appropriate actions while adjusting to meet the unique needs and circumstances of the local community.

Should you consider opening?

- ✓ Will reopening be consistent with applicable state and local orders?
- ✓ Is the school ready to protect children and employees at higher risk for severe illness?
- ✓ Are you able to screen students and employees upon arrival for symptoms and history of exposure?

ANY NO → DO NOT OPEN

ALL YES →

Are recommended health and safety actions in place?

- ✓ Promote healthy hygiene practices such as hand washing and employees wearing a cloth face covering, as feasible
- ✓ Intensify cleaning, disinfection, and ventilation
- ✓ Encourage social distancing through increased spacing, small groups and limited mixing between groups, if feasible
- ✓ Train all employees on health and safety protocols

ANY NO → MEET SAFEGUARDS FIRST

ALL YES →

Is ongoing monitoring in place?

- ✓ Develop and implement procedures to check for signs and symptoms of students and employees daily upon arrival, as feasible
- ✓ Encourage anyone who is sick to stay home
- ✓ Plan for if students or employees get sick
- ✓ Regularly communicate and monitor developments with local authorities, employees, and families regarding cases, exposures, and updates to policies and procedures
- ✓ Monitor student and employee absences and have flexible leave policies and practices
- ✓ Be ready to consult with the local health authorities if there are cases in the facility or an increase in cases in the local area

ANY NO → MEET SAFEGUARDS FIRST

ALL YES → OPEN AND MONITOR

CDC

cdc.gov/coronavirus

Resources

- US DOE Online Education and Website Accessibility
  https://youtu.be/DCMLk4cES6A
  https://www.youtube.com/watch?v=DCMLk4cES6A
- Facebook page
- Connect Hear Blogg – Tina Childress & Catherine McNally
  http://connect-hear.com

Remote Learning Considerations

Accessibility

- Closed captioning – speech to text, CART, captioning within videos
- Auditory access and audibility - use RM system or Bluetooth, connection with computer, y-plug for parent headset, mic/headset for teacher
- Visual access – lighting
- Literacy – heavy use of written material may require ASL

Readiness

- Personal amplification on and working
- Learning space with limited distractions
- Attention and motivation
- Listening effort and fatigue

Masks

- Muffle sound and reduces speech intelligibility

During Live Presentations-…Ensure the Student is Engaged (Vicki Anderson, UMN)

- Check that student is wearing his/her hearing instruments and verify that they are working
  - And if they are using their remote microphone system (FM/DM)
  - Or headphones
- Face the camera and student
- Speak at a normal-to-slightly slower rate
- Watch for student's comprehension (student's engagement, parent may help determine this for younger students)
- Check for understanding
  - Ask open-ended questions
- Repeat and/or rephrase as needed
  - If student misses a particular word due to inability to hear or discriminate certain sounds, rephrasing or expanding will help
- Provide visual supplements

Supporting Students who are Deaf and Hard of Hearing: Shared and Suggested Roles of Educational Audiologists, Teachers of the Deaf and Hard of Hearing, and Speech-Language Pathologists

(Approved by the Board of Directors of the Educational Audiology Association February 2018)

When the student's team is designating primary responsibility for each activity listed, the professional scopes of practice and state licensure/certification requirements, as well as training and experience, should guide considerations for specifying responsible personnel. Areas with direct scope of practice implications are checked.

Student Assurances: Audiological and Equipment Needs	Ed Aud	TODHH	SLP	Other
1. Audiological evaluations that include recommendations to enhance communication access and learning.	✓			
2. Diagnosis of auditory processing disorders (APD) with recommendations to manage APD issues provided to school personnel for the classroom and to parents for out of school consideration.	✓			
3. Management of auditory access in all educational environments				
4. Assessment of classroom acoustics with recommendations made to improve classroom listening environments where necessary.				
5. Evaluation and fitting for personal hearing instruments, classroom, and other hearing assistive technology.	✓			
6. Management of hearing assistive devices including maintenance and troubleshooting.				
7. Provision of training for school personnel and students, when appropriate, to perform listening checks and basic troubleshooting to maintain proper functioning of personal hearing instruments and hearing assistance technology.				
8. Provision of hearing assistive technology services including educating students, teachers of the deaf/hard of hearing, and other school personnel regarding technology performance and expectations.				
9. Use of daily listening checks to monitor functioning of hearing technology used by students.				
10. Other:				
Student Assurances: Communication - Speech, Language, Auditory, Visual Needs	**Ed Aud**	**TODHH**	**SLP**	**Other**
11. Evaluation of current speech production skills including articulation, fluency, voice, and resonance, as appropriate for the student's preferred language and communication mode.			✓	
12. Evaluation of current language skills in the student's preferred language and communication mode, including: • Comprehension, expression, and language processing in oral written, graphic and manual modalities • Phonology, semantics, syntax, morphology and pragmatics/social aspects of communication • Pre-literacy and language-based literacy skills, including phonological awareness • Description and interpretation of specific language communication skills and needs identified through appropriate formal and informal, standardized and non-standardized assessments.				
13. Evaluation of communication-related visual and/or auditory skills and needs as appropriate in the student's preferred language and communication mode.				
Student Assurances: Communication - Speech, Language, Auditory, Visual Needs	**Ed Aud**	**TODHH**	**SLP**	**Other**

14. Implementation of an appropriate therapy plan to develop speech, language, pragmatics, speechreading and auditory skills including strategies for generalization in the general education classroom.				
15. Self-advocacy instruction and support to enable students to advocate for their needs with peers, school personnel and other communication partners including: • Evaluation and inclusion of communication goals targeting identity, self-advocacy and communication repair strategies • Inclusion of language and communication goals related to classroom accommodations and modifications • Orientation and /or instruction for peers, families, and school staff regarding communication development, the impact of hearing loss, and communication repair strategies.				
16. Services that ensure opportunities for students to develop peer-to-peer social communication skills including: • Facilitated support groups for children who are deaf or hard of hearing or who have other auditory disorders. • Goals for communication repair strategies that will facilitate communication with peers. • Orientation to hearing peers that encourages social interactions and communication.				
17. Other:				
Student Assurances: Academic Needs	**Ed Aud**	**TODHH**	**SLP**	**Other**
18. Evaluation of educational performance in accordance with the requirements of IDEA 330.304 (b) that includes: • Use of a variety (no single measure) of assessment tools and strategies to gather functional, developmental and academic information. • Use of reliable and valid tools administered in the child's preferred language or other mode of communication to yield accurate information. • Measures administered by trained and knowledgeable personnel, according to procedures by the producers of the assessment tools.				
19. Assessment that distinguishes learning issues related to hearing status from those related to other cognitive, sensory or physical challenges.				
20. Specialized academic instruction to include preview and review of academic material to help optimize learning.		✓		
21. Specialized instruction including expanded core curricular areas such as communication, career education, self-determination and advocacy, social-emotional skills, technology and family education.				
Student Assurances: Academic Needs	**Ed Aud**	**TODHH**	**SLP**	**Other**

22. Assessment of literacy skills conducted in the child's preferred language and communication mode.				
23. Literacy development plans designed and implemented according to the individual student's needs.				
24. Provision of interpreting, notetaking, captioning, transliteration, and/or voice-to-text services to optimize access to instruction for those who require these supports.				
25. Provision of optimal visual and auditory access for both assessment and instruction.				
26. Other:				
Collaboration Program Management Needs for Students who are Deaf/Hard of Hearing: Identify Individual Responsible for Coordination	**Ed Aud**	**TODHH**	**SLP**	**Other**
27. Educational plans developed, reviewed, and implemented in a timely manner by team members who have knowledge, skills, and resources related to the impact of hearing loss/deafness on communication, access to classroom instruction and academic performance.				
28. Communication that is consistent between school-based instructional staff and other specialized personnel (e.g., private SLPs, interpreters, audiologists).				
29. IEP and 504 development and meeting participation by one or more specialists in hearing loss/deafness to address student communication, education, access needs and to develop a transition plan for post-secondary education/training/employment.				
30. Education of students and their families regarding hearing status, communication approaches, associated accommodations, technology options, and self-advocacy.				
31. Observation of classroom and school environments that continuously evaluates and monitors communication access, classroom acoustics, and how children are functioning in these settings.				
32. Consultation activities that ensure school personnel understand the language, communication, social, and educational effects of hearing loss/deafness, technology options and associated accommodations.				
33. Education of students and their families about resources in the community, financial resources (for personal hearing technology), educational resources and opportunities to connect with other students who are deaf and hard of hearing and their families.				
34. Other:				

Comprehensive Educational Evaluation

There is more to children than their ears and auditory skills!

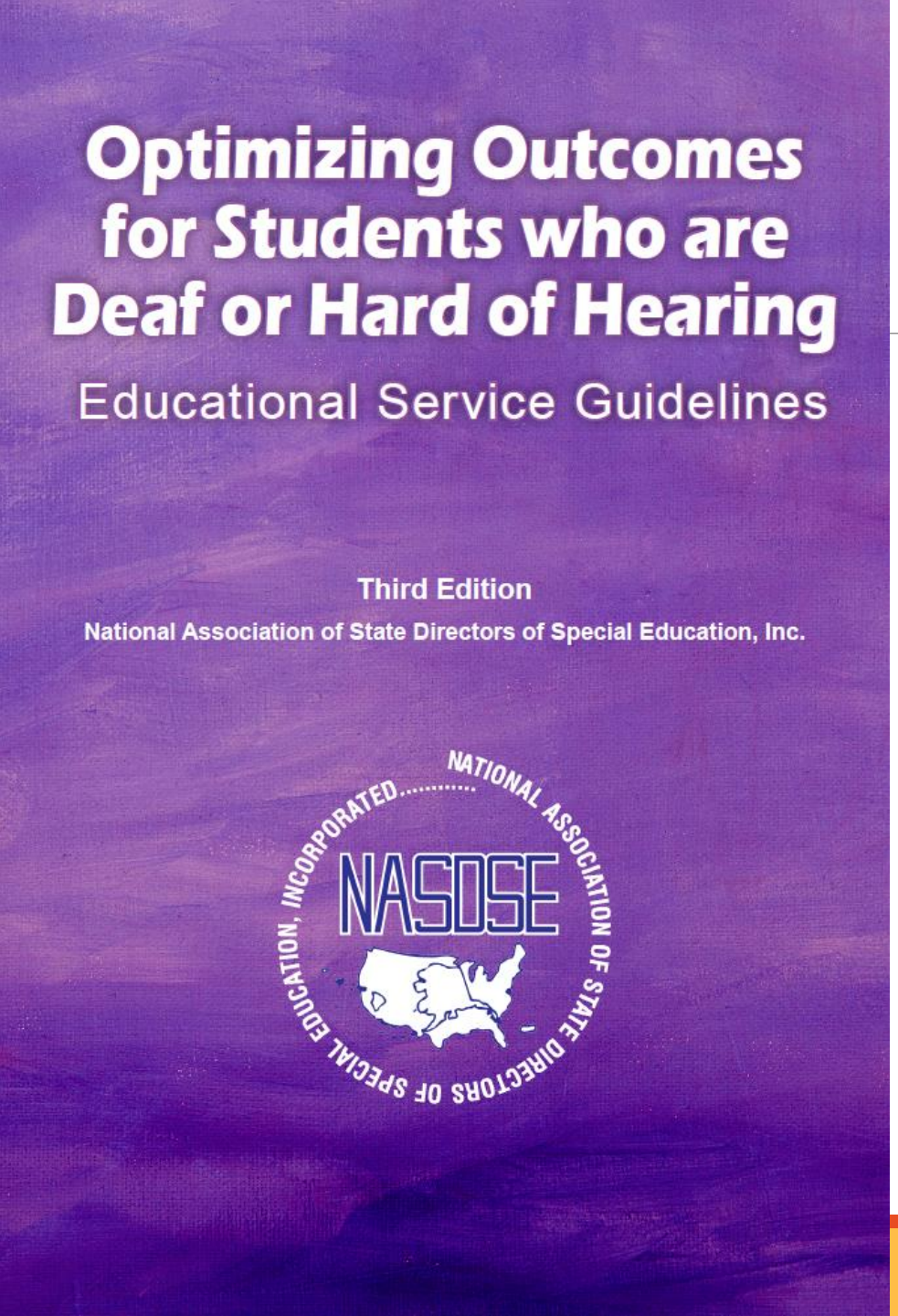
Advocacy by audiologists is needed to inform the implications of any degree of reduced hearing, to promote comprehensive assessment for infants, young children, and youth

Tools:

- NASDSE Optimizing Outcomes for Students who are Deaf or Hard of Hearing
- Michigan Educational Services Matrix

NASDSE (2018) Assessment Recommendations

- Auditory status and auditory function
- Vision (acuity and functional vision)
- Spoken language (comprehension and production)
- American Sign Language or other sign system (if used)
- Speech
- Cognitive and academic performance
- Social, emotional, and behavioral
- Self-determination and self-advocacy.



National Association of State Directors of Special Education (NASDSE)

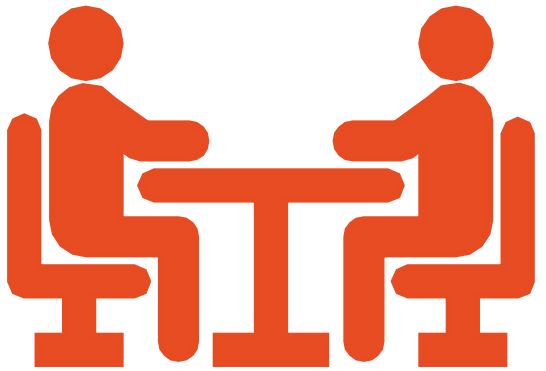
www.deafedguidelines.org

Optimizing Outcomes for Students who are Deaf or Hard of Hearing: Educational Service Guidelines (3rd Ed) 2018

- Essential Principles to Optimize Education of Students who are Deaf or Hard of Hearing
- Federal Laws and Policies
- Early Identification and Intervention
- Evaluation and Eligibility
- Goals, Services and Placement
- School Environment Access and Accommodations
- Post-Secondary Transition
- Personnel
- Implementation: Deaf and Hard of Hearing Program and Service Review Checklist

Chapter 1. Essential Principles to Optimize Education for Students who are Deaf/Hard of Hearing

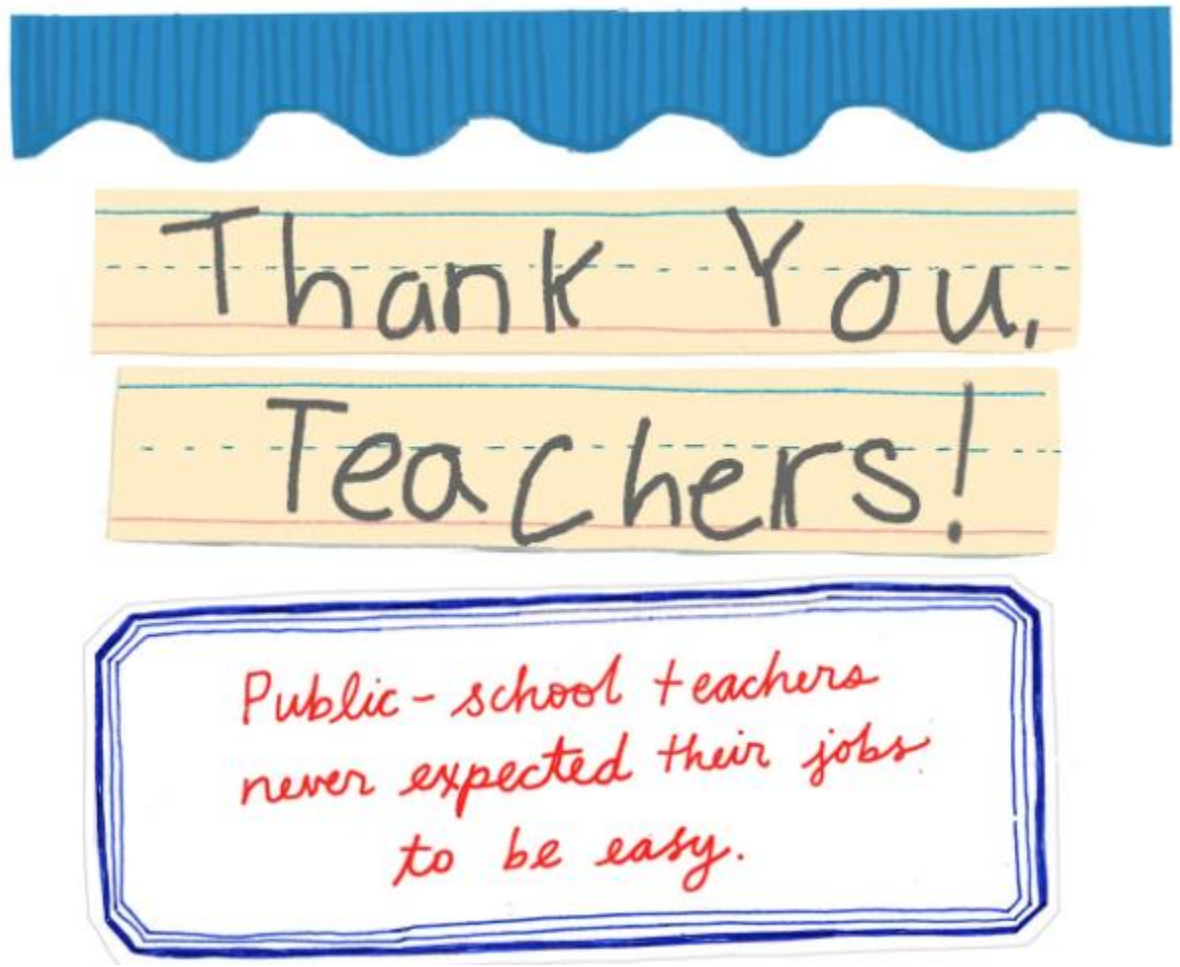
1. Each student is unique.
2. High expectations drive educational programming and future employment opportunities.
3. Families are critical partners.
4. Early language development is critical to cognition, literacy and academic achievement.
5. Specially designed instruction is individualized.
6. Least restrictive environment (LRE) is student-based.
7. Educational progress must be carefully monitored.
8. Access to peers and adults who are deaf or hard of hearing is critical.
9. Qualified providers are critical to a child's success.
10. State leadership and collaboration is essential.



Self-Care

NY Times (5.21.20) I'm Teaching Into a Vacuum: 14 Educators on Quarantine Learning
https://www.nytimes.com/2020/05/21/business/coronavirus-teachers.html?campaign_id=9&emc=edit_nn_20200522&instance_id=18692&nl=the-morning&regi_id=78940537&segment_id=28804&te=1&user_id=72ec0eb589febdf794189b0b4b36952b

From PBS Education
https://www.pbs.org/education/blog/staying-calm-during-crisis-5-tips-for-self-care



Q & A