



Learning for Children with Auditory Access Needs: Insights Gained During COVID¹

Presented in partnership with Seminars in Hearing

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Disclosures

- **Presenter Disclosure:** Financial: Cheryl DeConde Johnson is employed by Salus University and the University of Arizona. She received an honorarium for presenting this course. Non-financial: Cheryl DeConde Johnson has no relevant non-financial relationships to disclose.
- **Content Disclosure:** This learning event does not focus exclusively on any specific product or service.
- **Sponsor Disclosure:** This course is presented by Seminars in Hearing, a publication of Thieme Medical Publishers, in partnership with AudiologyOnline.



Learning Outcomes

After this course, participants will be able to

- Describe three general learning challenges for deaf and hard of hearing students during COVID.
- Explain one modification in the use of remote microphone systems for online learning.
- Describe the four parts of the S.E.T.T. framework to identify assistive technology needs of students.



Disclosures

I do not walk in your shoes...





Auditory Access is complicated!

Audition

- Is it audible?
- Can the student comprehend what is heard?
 - Listening ability
 - Language level
 - Motivation
 - Content
 - Vocabulary
 - Visual supports



Auditory Access is complicated

Access

- What does accessible mean?
 - ADA²: *Title II requires schools to ensure that students with disabilities receive communication that is as effective as communication with others ...*
 - IDEA³: A free and appropriate public education (FAPE)
- How do we achieve it?
 - ADA: *through the provision of appropriate auxiliary aids and services* (504 Plan)
 - IDEA: *special education and related services; modifications and accommodations; measurement of progress* (IEP)



Auditory Access is complicated

- Goal is always full communication access





General Impact of Remote Instruction

- Home learning environment
- Home support
- Access to instruction
- Teaching environment
- Specialist support
- Instructional content
- Social isolation

Remote Learning Considerations – DHH Students

Accessibility

- Closed captioning – speech to text, CART, captioning within videos
- Auditory access and audibility
- Visual access – lighting
- Literacy – heavy use of written material may require ASL or other modifications

Readiness

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

RM Access Challenges

- Analysis to determine need
 - Home environment
 - Technology used
 - Instructor's environment
 - CADS?
- Getting into schools and distributing to students
 - Convincing administrators of need
- Motivation of student to use system
- General education teacher willingness to use RM system
- Support and instruction to parents on operation of equipment and connectivity with computers
- Internet bandwidth and signal integrity in the home



RM Access Challenges

- Connectivity options to improve audibility
 - RM transmitter to computer
 - Bluetooth to computer/tablet
 - Splitter: RM transmitter and listening headphones (parent/caregiver access)



Other Remote Learning Implications for DHH Students

- Communication access outside of school
- Socializations reduced
- Parents as teacher aides
- Mainstreamed students most vulnerable
- Many students fell through the cracks, minimal attendance, little sustained learning, lost interest
- Potential abuse in the home



Other Remote Learning Implications for DHH Students

TOD and School Strategies

- Joining students from various schools
- Inviting deaf adults into class discussions
- Online social opportunities as extracurricular activity (DHH Club)
- School provided meals

Silver Linings

- TODs reported increased instructional time
- Deaf ed classrooms retained many of same learning activities
- EI providers reported benefits of increased parent involvement
- Virtual IEPs provided greater structure for TOD and parent participation
- Overall, parent involvement benefits



Classroom Instruction Under COVID

- Masks
 - HF reductions up to 12dB for N95 mask⁴
- Social Distancing
- Classroom Noise levels
 - Air circulation systems





Accommodations

- RM personal or classroom systems
- Enhanced Lighting
- Seating placements
- Noise reduction strategies



Roger™ SoundField – optimizing audibility

As educators, optimizing learning for students is key. The requirements of COVID safety protocols can make students have a hard time hearing their teacher an...

youtu.be

<https://www.youtube.com/watch?v=JOi3FgM0mxI>



Student, Environment, Tasks, Tools (S.E.T.T.) Framework (Zabala)⁵

- 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

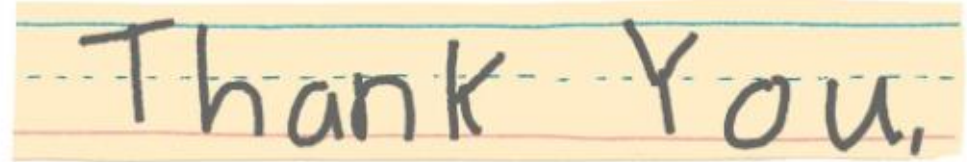


S.E.T.T. Framework

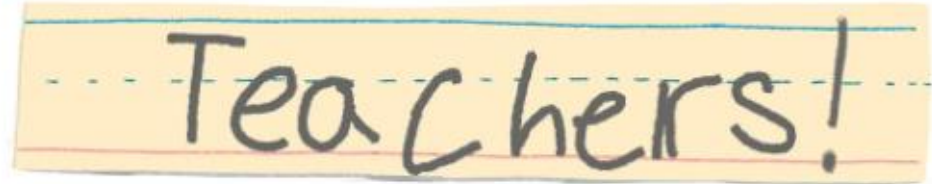
<u>S</u> tudent	Describe the student's hearing status and auditory access needs.
<u>E</u> nvironment	Describe pertinent components of the learning environment, i.e., background noise, lighting, teacher instructional style.
<u>T</u> asks	Describe the learning tasks that are required of the student, i.e., large group lesson, small group table discussions, lab work.
<u>T</u> ools	Identify the tools that could be considered to provide access to the classroom and the specific learning tasks.

Summary

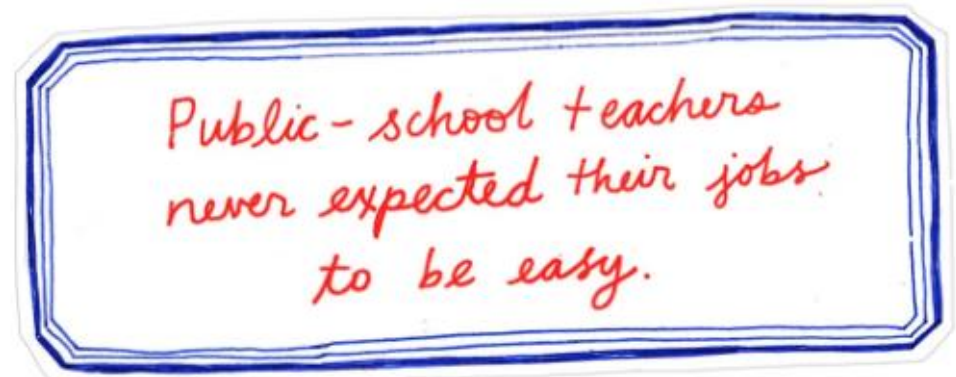
- Persistence
- Flexibility
- Grace



Thank You,



Teachers!



Public-school teachers
never expected their jobs
to be easy.

Always strive for full access for DHH children; other wise we are setting children up to fail.

References

1. Johnson, C.D. (2020). Remote Learning for Children with Auditory Access Needs. In Seminars in Hearing, Wireless Connectivity for People with Hearing Loss, L. Thibodeau Ed., 41, 302-308.
2. U.S. Department of Justice, U.S. Department of Education (2014).FAQ on Effective Communication for Students with Hearing, Vision, or Speech Disabilities in Public Elementary and Secondary Schools.
<https://www2.ed.gov/about/offices/list/ocr/docs/dcl-faqs-effective-communication-201411.pdf>
3. Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004), 34 C.F.R. Part 300 and 301, Assistance to States for the Education of Children with Disabilities and Preschool Grants for Children with Disabilities; Final Rule. Federal Register Vol 71, 156; August 14, 2006
4. Goldin, A., Weinstein, B., & Shiman, N. (2020). Speech blocked by surgical masks becomes a more important issue in the Era of COVID-19. Hearing Review, 27, 8-9.
5. Zabala J. SETT Framework. Available at: www.joyzabala.com. Accessed August 7, 2020