

Educational Audiology: In the Trenches

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You've diagnosed a school-aged child with hearing loss, fit and verified hearing aids, and counseled the child and parents about benefits, challenges and expectations. Targets were met and the family seemed to understand the information you provided. They came in for their two-week follow-up appointment with no issues. With provincial funding you could also fit a remote microphone DM system which you provided at the follow-up appointment. The family seemed to understand the benefit of the DM system and were excited to use it. You feel good about the fitting and plan to see the family again in six months. You have provided the child with great audibility and access to speech sounds! Fantastic! Now, what happens next? What happens after the child leaves your clinic? Real-world communication experiences are fraught with barriers unaddressed by met targets and parental understanding. For children, the school environment contains the crux of these barriers. For example, access to a teacher's voice is a primary concern, as teachers are the purveyors of the curriculum. Not to worry, you fit a remote microphone personal DM system! Thank you to all clinical audiologists who promote and recommend these systems, as without them, many of your patients are effectively absent from school. But is the remote microphone being used correctly? Or is it even being used at all?! Who knows?!

Some parents seem to understand the benefit and need of the remote microphone and follow through with ensuring that it makes it to school. Others are told by the teacher that they already use a "classroom microphone" so the personal DM RM-HAT is not needed, and as a result, it remains in the box. Parents may or may not send the hearing technologies to school; they may or may not take the time to show the teacher how to use them, and very few parents can impart the technologies' importance. Use (or non-use) of RM-HAT is only one example of how the hard work of clinical/dispensing audiologists can be undone. Having eyes and expertise in the classroom is CRITICAL in ensuring a child's access to the auditory curriculum and other auditory learning experiences.

Clinical audiologists are not typically able to see the extensive efforts of their programming, verifying, and mapping at work beyond the clinic walls, nor are they privy to the assortment of barriers that may present themselves within the educational setting. While a clinician's window to their patients' daily listening environments is limited to subjective feedback, educational audiologists have the unique opportunity of observing and addressing multi-faceted auditory barriers beyond the clinic walls. That said, accessing an educational audiologist may present its own barrier, since the availability of such services varies widely between provinces and states.

Graduate Programs

While audiology graduate programs provide a wide range of coursework and clinical placements in

hospitals, community health centers, and private practices, educational audiology course content and school placements are limited or non-existent. This lack of coursework and placements often results in reduced understanding of the role of the educational audiologist; whereas, the benefits of student exposure to educational audiology are vast and shed light on considerations for auditory accessibility apart from hearing technologies.

Roles and Responsibilities

Educational audiologists can be employed by a single school district, contracted by a district or even provide service to multiple districts across wide-reaching geographical areas. While the COVID-19 pandemic increased opportunities for virtual meetings and interactions, travel (be it between schools or between towns) remains a reality, and educational audiologists are often found taking meetings, returning emails and eating lunch in their “carffice” (car/office), amongst their multiple suitcases of cords/cables, remote microphones, portable equipment, and resources.

As all audiologists, educational audiologists diagnose, manage and treat hearing problems, but more specifically, educational audiologists are members of the multidisciplinary educational team with knowledge and skills regarding:

- the impact of hearing loss on language, learning, literacy, and social development
- access to the auditory instruction and collaboration presented in the classroom and the greater school community
- least restrictive auditory environments
- strategies for teaching and learning,
- educational goals as indicated on individual education/program plans.

Through specialized assessments, classroom observations, and discussions with students, staff and parents, educational audiologists **ensure students’ access** to teachers and staff, peers (both in and out of the classroom), and the 21st-century classroom. While addressing classroom acoustics falls directly in the scope of educational audiologists, additional roles and responsibilities include:

- Monitor, recommend and/or evaluate the effectiveness of hearing technologies in the education environment ? *this may mean entering into a discussion with clinical/dispensing audiologist about hearing technologies*
- Facilitate a better understanding of hearing, hearing technologies, and the impact of hearing loss on language, learning, literacy, and social development
- Ensure connectivity to Chromebooks, tablets, classroom interactive whiteboards, and augmentative/alternative communication devices
- Counsel and guide students in their development of self-determination (e.g communication strategies, self-advocacy skills)
- Create communities of same-self peers through group workshops, one-on-one meetings, etc.

- Refer for medical, habilitative (e.g., speech-language intervention, auditory training), or other professional activities/attention
- Collaborate with parents, community agencies, and relevant professionals
- Help implement school hearing screening programs
- Advocate on behalf of students to ensure auditory access in school

In addition to the student and their learning team, educational audiologists often work very closely with teachers of the deaf/hard of hearing, the child's clinical audiologist, as well as speech-language pathologists, occupational therapists, physical therapists, teachers of the visually impaired, psychologists, language consultants, cultural brokers, and reading specialists.

Population

Educational Audiologists work with children from preschool through Grade 12 with hearing losses of varied etiologies and degrees. Several children have identified disorders, including 22q Deletion Syndrome, Enlarged Vestibular Aqueduct (EVA) Syndrome, Auditory Neuropathy Spectrum Disorder (ANSD), Connexin 26 mutation, Waardenburg Syndrome, Treacher Collins Syndrome, Usher Syndrome, Alstrom Syndrome, chronic otitis media with effusion, cholesteatomas, microtia, atresia, auditory processing disorder (varied profiles), and Autism Spectrum Disorder (ASD). In addition, some students have multiple, complex medical conditions, requiring a multidisciplinary approach to ensure the most comprehensive care (Musiek, 2022).

Working Together

It is ideal when clinical and educational audiologists work together to support a child who is deaf/hard of hearing. To this end, the Educational Audiology Association recently developed the document, [Shared and Suggested Roles of Educational Audiologists and Clinical Audiologists](#), that serves as a framework for discussion and facilitates collaboration between educational and clinical audiologists, in the hopes of providing comprehensive services for the child. It is intended to provide a template of the roles an audiologist can serve to improve communication and clarity for all professionals serving school-aged children. Roles and responsibilities may vary based on each provider's areas of expertise and availability.

In Summary

It is estimated that approximately 8% of Canadian school children have a hearing loss that may impact their educational progress (Government of Canada, 2016). Considering this statistic, it is likely that several students in every school district have some degree of hearing loss. How can we be sure that ALL students with any degree of hearing loss have appropriate access to the educational curriculum (C. Spangler, 2016)? Without the American legal requirements of the Individuals with Disabilities Education Act (IDEA) or Section 504 of the Rehabilitation Act of 1973, Canadian students who are deaf/hard of hearing may be at a disadvantage in that educational audiologists are not required members of the educational team, and rather brought on board when a school board or school deems it necessary. Special education directors, administrators and teachers do not know what they do not know and students who are deaf/hard of hearing are often thought to be "getting by," "coping" or even 'hearing' because the myth that hearing aids are corrective like

glasses is prevalent! What needs to happen to get educational audiology services to all Canadian students who are deaf/hard of hearing?

1. University training programs need opportunities to deeply explore and experience children's experience within the educational environment
2. The complexity of hearing technologies needs to be addressed by those with education and expertise in hearing technologies. **Experience cannot be confused with expertise.**
3. School boards need to be held accountable for providing the least restrictive environments to students who are deaf/hard of hearing students, which means creating positions and hiring professionals best equipped to provide an accessible Canada.

Clinical and dispensing audiologists can help advocate for educational audiology by....

1. Tracking the amount of time spent communicating with schools and teachers of the deaf/hard of hearing
2. Suggesting fees or contracts for more extensive/meaningful consultation with schools
3. When you receive a call from a school or teacher of the deaf/hard of hearing, always ask "Who is your educational audiologist"?
4. Talking to parents about how educational audiologists can support their children
5. Creating a relationships with teachers of the deaf/hard of hearing
6. Presenting to the local school personnel about the importance of educational audiology

Resources

1. Educational Audiology Association. 16 Reasons Why Your School Needs an Educational Audiologist (2010). Available from <https://www.edaud.org/position-stat/7-position-05-10.pdf>
2. Educational Audiology Association. Minimum Competencies for Educational Audiologists. Available from <http://www.edaud.org/position-stat/1-position.pdf>
3. Educational Audiology Association. Outcomes of School Based Audiology Services (2017). Available from <http://edaud.org/pdf/outcomes-project.pdf>
4. Educational Audiology Association (2009). Recommended Professional Practices for Educational Audiology. Available from www.edaud.org
5. Guidelines for audiology service provision in and for schools [Guidelines]. Available from www.asha.org/policy.
6. School Based Audiology Services: <http://www.edaud.org/advocacy/6-advocacy-09-09.pdf>

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3. Spanger, C. 2016. Student with Hearing Loss? Why the Educational Audiologist needs to be on YOUR school team! Ohio Board of Speech-Language Pathology and Audiology. Summer Quarter Newsletter, p. 7.