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The Value of Classroom Observation

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I recently served as a member of a doctoral committee in clinical developmental psychology, and a sentence from the dissertation has stuck with me ever since. The sentence was “Performance measures are poorly correlated with informant-based measures”, i.e., decontextualized clinical measures don’t correlate well with reports of real world behaviour from observers (such as parents, classroom teachers or the individual themselves). The explanation in the paper was that these two types of measures assess different things, so of course they wouldn’t correlate. Sure, but it’s still the same individual, shouldn’t they be at least somewhat related? This is not a huge surprise to us in the field of audiology, we are seeing an increasing focus on “beyond the audiogram” and the idea that audiograms as a decontextualized performance measure don’t predict an individual’s ability to function (or not) in their every day life, nor are they particularly helpful in providing strategies or interventions for support. In deaf and hard of hearing education, we have thankfully moved on from the days when audiograms determined both student funding and the availability of services. When I started in the field, students with more severe hearing loss were only eligible for additional school board funding and more intensive service under the “in lieu” funding model, where students in mainstream settings had to have a pure tone average of 70 dB in the better ear to qualify (i.e. if their hearing loss was severe enough that the default educational placement was considered to be a provincial school for the deaf, but they were attending their home school in lieu of a school for the deaf). However, it remains the case that school staff are trying to sort out strategies and accommodations for a student based on a small amount of clinical assessment information. How do we bridge this gap between decontextualized assessment and the development of a management plan tailored precisely to the needs of each individual student? I suggest that the answer lies in informant-based information gathered by educational audiologists, including both the compilation of tools such as teacher questionnaires or checklists and direct classroom observation of students. With the extreme shortage of educational audiologists in Canada, and the increasing complexity of hearing technologies, many of us find that the limited time we have is quickly used up on technological issues – fitting, verification, in-service, paperwork and trying to keep themselves and teachers of the deaf and hard of hearing up to speed on the many technological issues that can negatively impact effective use of technology in the classroom. However, educational audiologists have unique opportunities and skill sets to gather the kind of functional information that informs effective strategies and interventions, if they only have the time to do so.

Let me give you an example. I once did a classroom observation of a math lesson where a student with hearing loss was seated at the back of the class. The teacher finished the lesson and said “OK, open your textbook, turn to page 30 and do questions 1 to 10 on your own, then we’ll take them up”, and then worked as his desk while the students did the questions independently. Because of where I was sitting, I could see that the student was working on questions 1 to 10, but from the

wrong page. What does this tell me? If the student has no FM system, they need one. If they have a sound field system, they really need a personal FM system. If they have a personal FM system already, perhaps they have an auditory memory problem and the teacher needs another strategy – jot down the page number and questions on the blackboard, or do a comprehension check with the student. But there's also a metacognitive/ advocacy piece for the student. The student obviously heard the page number incorrectly, but did they realize that they were on the wrong page? Did the student not say to themselves "hmm, Mr. Bedley was doing multiplication but this page isn't about multiplication, maybe I should check"? I think there are students who are so used to being confused, or unsure, that when something doesn't make sense, they don't question it but simply carry on. This would be an excellent Individual Education Plan (IEP) goal for the student, identifying communication breakdown. Other students have better metacognitive skills and are able to identify that something isn't quite right and needs clarification, but lack the self-advocacy skills to speak up, so self-advocacy would be an important IEP goal in that case.

There are two populations of students where classroom observation and functional hearing assessment by an educational audiologist is crucial – students who wear hearing aids, and students with auditory processing disorder. For students with cochlear implants or bone anchored devices, we do still use aided audiograms which at least give us a sense of access to phonemes, but for students who wear hearing aids, this indication of access to speech information is not easily found.

Older teachers of the deaf and hard of hearing still ask "whatever happened to the aided audiogram?" while younger teachers ask simply "how can I tell what this student is supposed to be able to hear with their hearing aids so I can plan my own goals and help classroom teachers understand what to expect?" While I do explain real ear testing to teachers, and at one point even wrote an article about aided audiograms as a result of being asked so often (Millett, 2010), the reality is that SPLograms don't really resonate with teachers. Instead, I teach functional hearing assessment, having teachers of the deaf and hard of hearing do 6 sound tests, and other speech perception tasks under a variety of real world listening situations, to find out for themselves what a student is able to hear with their hearing aids. A focused observation in the classroom by an educational audiologist also provides a wealth of information. I recently observed a student mostly staring off into space during a lesson, then connected her personal FM system. Within the first 30 seconds, the student put up their hand in response to a question and answered it correctly. The classroom teacher was shocked, this student never volunteered an answer and the teacher assumed that the student was not very capable. Of course I would have predicted benefit from an FM system from the student's audiogram, but the difference was far more dramatic than what the audiogram suggested. This is the kind of data that resonates with classroom teachers and with parents.

The other population of students for whom classroom observation is a critical part of developing a management plan is students with auditory processing disorder. Research links between the test profile of an individual student, and accurate prediction of functional difficulties at home and school, are weak and largely theoretical. In time, no doubt the research delineating profiles of auditory processing disorder will allow us to tailor our recommendations more effectively. However, as yet, predictive and discriminant validity of these models has not yet been demonstrated; our models of auditory processing rely heavily on face validity and so our recommendations remain generic and universal. In the blunt, but honest, words of many teachers, "why go to the trouble of having the child assessed if the audiologist just sends the same list of recommendations for every child? They could just send me the list." It is an uncomfortable question for audiologists to hear. Nowhere do the gaps in the links between decontextualized assessment and management become more stark, than at a school team meeting with parents who

are confused, frustrated and angry at what they see as a lack of responsiveness to APD reports, and school staff who are not entirely sure what APD is or what to do about it. Clinical recommendations can range from what is standard teaching practice already, to those which are unrealistic for a teacher with 30 students, to those which are in fact contraindicated by educational research on effective pedagogy (such as whole word reading approaches, which were debunked in the 1970s). Classroom observation allows us to see the student in a dynamic learning environment and identify challenges which are specific to that student in that classroom, something which our APD test scores do not provide. Clinical assessment allows us to identify the problem, the gathering of direct observation data and observant-based reports tell us what to do about it.

My take home message? We need more educational audiologists in Canadian schools, not just to manage equipment, but to serve an integral role in the educational management of students. We have seen incredible changes with newborn screening and early intervention, we need to keep the momentum going once by guaranteeing access to audiology services at school.