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Supporting Students Transitioning to Postsecondary Education: Advice from an Assistive Technologist

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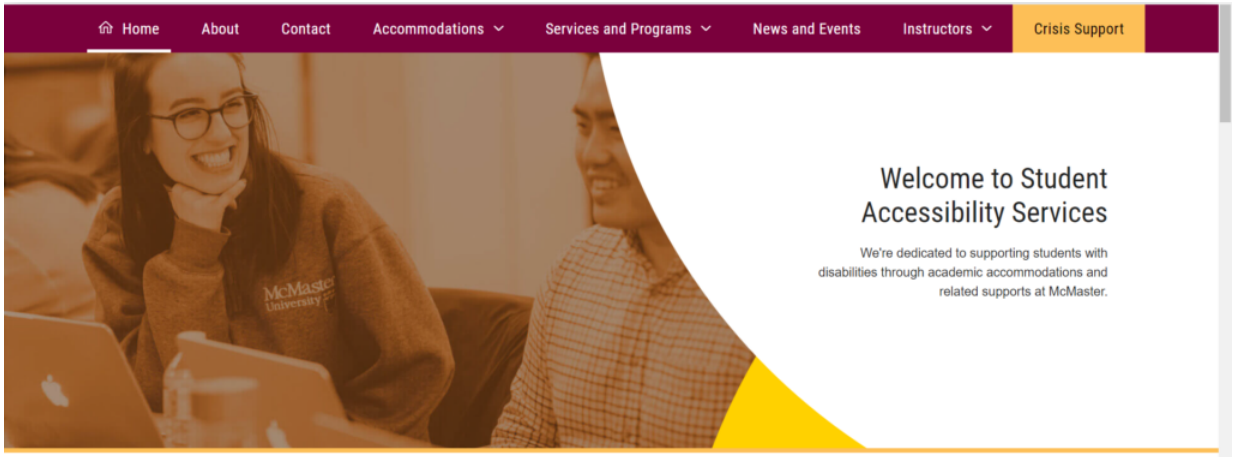

Pre-pandemic, I wrote a column about some of the issues students should consider when planning for and transitioning to postsecondary education. A lot has changed in colleges and universities, first with the pandemic and then with the return to campus. A wider range of learning modes is offered to students, from completely on-campus in-person, to a variety of synchronous and asynchronous online options, creating the need for more flexibility in accommodations. I recently had the pleasure of connecting with Angela Harrison, the Assistive Technologist Consultant at the Student Accessibility Services Office at McMaster University in Hamilton, to chat about her experiences in supporting deaf and hard-of-hearing students who require assistive technology. Assistive technologists play a crucial role in supporting students with disabilities – they have both technical expertise and the knowledge and skills of learning strategists; they know not only how technology works, but also understand the complex learning environments of postsecondary classrooms and the stresses on students and instructors. I had many questions about high school students transitioning to college and university since that's not the population of students in my program. We also had a chance to chat about the technical challenges of assistive technology these days, and I asked her what suggestions or tips she might have for audiologists to support clients graduating from high school.

Question: What can students expect at postsecondary?

Angela: In today's postsecondary environment, students can expect variety in their learning experiences. Learning may occur online, in-person, or with some blending of both formats. Each design brings different strengths and opportunities for enhancing or supplementing the auditory environment. During the COVID pandemic when schools were online, students benefited from the

concurrent advancements of mainstream speech-to-text technology in automatically generated captioning, with a reasonably high degree of accuracy (in some contexts). Many faculty invested in basic audio recording equipment for teaching from home, such as plug-and-play microphones, that improved auditory conditions for listening and captioning. The partial-capacity return to the postsecondary campus saw in-person lectures, tutorials, and labs attended by in-person and online learners; classroom audio and video were simultaneously captured and/or live-streamed to participants attending from home. However, the auditory environment of a campus classroom is not as well controlled and the benefits afforded by being online deteriorated with the return to classrooms, even for those students who continued remotely. Many institutions have kept options for fully online, in-person, or blended courses post-pandemic. Students must be able to adapt to these different learning environments.

There is also a lot of variation in classroom design and equipment on a postsecondary campus. From the design perspective, learning takes place in spaces big and small, from the largest lecture theatre and event hall to the smallest active learning classroom, lab, or study space. And there are off-campus research, placement, work, and travel opportunities for students. Attempts to standardize the audio-visual set-up are complicated by factors such as the age of the building, the size and shape of the room, which faculty or department owns the space, and its primary function. In addition, students must be able to adapt to different learning activities from passive listening to active participation in different learning environments.

Pam: This is something that I think first-year students don't anticipate. Of course, they attend classes in different rooms in high school, but classrooms, class sizes, acoustical environments and instructional methodology are quite similar across subjects. They will not have encountered the 500-seat lecture hall or anticipated the amount of interactive discussion in a seminar course. Our students are often accustomed to receiving high support from school and special education staff, and they may be unpleasantly surprised to learn that they must navigate academic life independently and serve as their own advocates. Secondary school staff and teachers of the deaf can help with academics, but there's a technical piece around knowing what options the student has for assistive technology in postsecondary education given the type of hearing aids and/or speech processors they have needs an audiologist to sort out.

Question: What kind of accommodations might a student be recommended in postsecondary?

Angela: The accommodation plan is personalized to the individual, and the process is designed to be responsive to change. Students will consult with their disability office at least once during intake to set up the accommodation plan. In addition, students are invited to contact their disability office at any time for consultation about challenges in a specific course, in which case a course-specific accommodation can be implemented or to request an update to their accommodation plan. Accommodations may include requests for alternate format materials, in-class or placement supports, or modifications to tests/exams procedures. Common accommodation options that are intended to supplement auditory conditions include:

Alternate Formats

- ASL interpreter

- CART
- video captioning
- lecture recording/transcripts

In-class Support

- use of a microphone
- use of an FM system
- instructor to provide copies of presentation material
- notetaker

Pam: I want to highlight what Angela said about consulting with their disability office. Some students are reluctant to register as a student with a disability because they don't feel comfortable identifying themselves, or they think they will be fine. It's SO important for students to register though, even if they think they don't need to – for a first-year student at a campus of 50,000 students (like at York), registering connects them with a person whose primary role is to support them, a person to whom they can come if they are confused, struggling or encountering a problem they don't know how to solve.

Question: What assistive technology is recommended?

Angela: The recommended technology depends on the accommodation plan and the environment. For example, the accommodation to use an FM system assumes that an FM system is available and compatible with a student's existing device. For example, McMaster has some classroom audio systems with integrated FM transmitters. Assistive listening devices can be borrowed and used with a wired headset or a telecoil. This accommodation works well when the student's hearing instrument has a telecoil programmed and their classes are scheduled in a room with an FM transmitter installed. Functionally, it is a situation akin to Goldilocks. Conditions must be "just right" for students to take advantage of FM systems in the built environment. If the student doesn't have telecoil programmed, the point is mute. If the student does have telecoil programmed, what are the chances that they are scheduled in the right classrooms for every course they are enrolled in? In the latter case, it is possible to request a room change but rescheduling is challenging when a student takes multiple classes. Accommodations are simpler with the flexibility afforded by using their own equipment compatible with their hearing device.

Another example refers to the recommendation for captioners, interpreters, or notetakers. Before the pandemic McMaster scheduled available service providers to attend classes on campus. During the pandemic we contracted the services of remote providers for virtual and online classes. Post-pandemic we have continued using remote services for in-person classes. Implementation on campus requires the student to have a laptop or smart device paired with a wireless microphone or FM receiver for fast, reliable, and quality audio for the provider to hear adequately to perform their work.

Pam: Angela and I commiserated that in the past, disability services offices could sometimes offer

a loaner FM system with a universal receiver that works with hearing aids/CIs via a telecoil. However, these days, many hearing aids don't have a telecoil option; if they do, the telecoil hasn't been programmed. Not all disability offices can offer a loaner system to students; this depends on the institution, but if they can, they need a universal receiver option. Purchasing loaner audio shoes or integrated/installed receivers for individual students is just not feasible for the disability services office, however, these items may be considered for students to buy for themselves when there are equipment funding options.

Question: One of the barriers to having assistive technology at college or university is the cost. Could you give me an overview of what funding is available to Ontario students for this equipment? In your experience, are most students able to access funding?

Angela: Ontario students with disabilities can access government funding for services and equipment if they qualify for OSAP. We recommend students apply for OSAP regardless of their family financial situation, so they don't miss the opportunity to qualify for specific funding for students with disability-related education expenses. Students need only qualify for a minimum of 1 dollar to become eligible for the Canada Student Grant for Services and Equipment for Students with Permanent Disabilities (CSG-PDSE), and the Bursary for Students with Disabilities (BSWD).The grant and bursary funds services and equipment necessary for participation in their postsecondary studies, such as a personal FM system. Some students also wish to take less than a full course load but worry that they will not qualify for OSAP funding as full-time students. However, a student with a disability can take a reduced course load while still being considered a full-time student for the purposes of OSAP.

The following guidelines must be met for eligible grant or bursary expenses:

I. The equipment or service must be supported by the disability services office. For example, the assistive technologist may recommend equipment to facilitate an accommodation listed on the student's accommodation letter provided by the disability office.

II. The equipment or service must be purchased LESS THAN 60 days before the start of the term.

III. Other funding sources must be exhausted (where applicable) before eligible expenses will be covered by the grant or bursary. For example, FM systems must be submitted to the Assistive Devices Program (ADP) and the family health insurance plan (where applicable) with the remaining unrecovered costs considered by the grant or bursary.

Institution-funded bursaries for students are another option for students to access financial support. It's important to note that postsecondary institutions administer all this funding. Students may wish to register with their disability office or consult with their aids & awards office for help navigating the funding options.

Pam: There seems to be some confusion over eligibility for FM systems through ADP, partly because graduating students could be 17 or 18 years of age and therefore covered under the children's or adult's programs.

Question: In your experience, how prepared do you find that students are in terms of what challenges there might be?

Angela and Pam: We both agreed that students are unprepared. Angela noted that students struggle with the shift to independent management of accommodations and devices – no parents or teachers can help. In addition, they don't necessarily understand the different types of accommodations that might be needed, or how these might differ from what they used in high school (for example, CART captioning is rarely if ever available in high school).

Pam: Angela made the most brilliant comment that in elementary and high school, "the student's environment is curated for them." This is absolutely true – resource teachers, teachers of the deaf, speech-language pathologists and others do most of the heavy lifting in terms of evaluating the learning environment and the student's learning needs, creating IEP goals, ensuring that school staff are implementing strategies and stepping in when things go wrong. However, at the postsecondary level, the physical and learning environment is not standardized and students are expected to be responsible for themselves by managing their own accommodations and reaching out to the disability services office for support.

Question: In your experience, are students generally prepared to be advocates for themselves?

Angela and Pam: Again, we both agreed that students are generally unprepared. They have often relied on parents managing their hearing health care needs (making audiology appointments, etc.) and school staff managing their educational needs. They don't always even know the make and model of their device if there is an app for their device, what accessories are available, and sometimes even who their clinical audiologist is and how to make an appointment. Students with cochlear implants are likely transitioning from a pediatric program to an adult program, with different audiologists, locations and services, or from the children's ADP program to the adult program.

Question: What role can the educational audiologist play to support students who are preparing for postsecondary?

Angela: Educational audiologists can be a wealth of information because they understand the technical aspects of assistive technology and the classroom challenges for students with hearing loss. Sometimes students have refused support from the Hearing Department in high school, but grade 12 is an excellent time to check in with these students who may not have been seen for a few years, specifically to discuss postsecondary options. Where possible, help students gather information about postsecondary programs and learn about different accommodations options, such as FM systems, CART, lecture recording, notetaking, and captions. Build self-awareness about how they manage communication in different environments and encourage students to contextualize the differences of their new environment by attending transition programs or workshops and (especially important), attending open houses and campus tours in person whenever possible. Help them sort out the steps in applying for OSAP and declaring disability status. Encourage students to register with the disability office (all the info will be on the institution's website) and to register early (July is a good time).

Question: What role can the clinical audiologist play to support students

who are preparing for postsecondary?

Angela and Pam: Students need to see their clinical audiologist before September for an updated audiogram and assessment of their devices (for example, in case new earmolds are needed). Please encourage them to apply for OSAP and fill out the disability verification form (DVF) on their behalf (this is the required documentation for students to declare disability status when applying for OSAP). The updated assessment is useful when filling out the DVF, while the full assessment is helpful documentation for the disability services office when building the accommodation plan. Encourage them to register with their disability office early and to submit the full assessment at their intake appointment. Work with the disability services office should they reach out with any questions.

Help them learn independence with managing their devices and appointments. Do they know the make and model of their device (the assistive technologist may ask)? Do they know how to use the accompanying app (if there is one) to adjust their device settings and why they might want to do so? Encourage them to attend preview week and transition programs to build an understanding of their communication needs in the new environment. Help them think through potential problems – if they move several hours away from home and are living in residence, what will they do if they run out of batteries, or their hearing aid breaks? If the student's device has the option for a telecoil, program it and show the student how to use it. This gives the assistive technologist more options for classroom accessibility with FM systems. Finally, ensure they understand when and how to contact you for support during this transition.

Review the options for assistive technologies compatible with the student's specific device (for example, some students have remote microphones that came bundled with the hearing aids that they have never taken out of the box). The clinical audiologist can help prepare the student (and disability office) by providing recommendations and purchasing support for microphone technology, as well as options for using the phone, watching TV, and interfacing with audio devices such as tablets (such as a compatible streamer). Encourage the student to consider getting a remote microphone and/or streamer.

Schedule a follow-up appointment at Winter break. Once students have been in classes for the fall term, they will have a far better sense of where they are still experiencing communication difficulties and may be more amenable to using assistive technology if they were reluctant before.

Angela and I agree that there are more considerations when preparing for college or university than most students and families anticipate. It takes a village to support students at this stage of their life. Students and families will have programs to review, campuses to visit, applications to fill out and submit, and decisions to make. Programs. School staff (educational audiologists, teachers of the deaf and guidance counsellors) need to help with the academic side of things. They can be an excellent resource for assisting students in understanding their own learning strengths and weaknesses, teaching them to be advocates for themselves, and developing learning and life skills strategies. Clinical audiologists are needed to ensure that students have a good understanding of their hearing profiles and hearing technologies, and to work with them to understand potential communication obstacles and provide information and guidance on what technology is available for them. Finally, disability services counsellors at the student's college or university need to become part of the team before classes start in September to ensure that students are well supported. This is the ideal time of year for that village to come together to ensure a smooth start for their arrival on campus in September and the first day of the next step in their academic

journey.