

Auditory Difficulties in the Classroom During COVID-19 (In-Person and Virtual)

At any point in the school year, up to 1 in 5 children in elementary school have some degree of temporary hearing loss (e.g., due to ear infections). More than 10% of students have communication difficulties. Hearing and auditory processing difficulties may impact all students but could have a greater effect on students with special needs such as Attention Difficulties, Autism Spectrum Disorder, Learning Disability, Cognitive Impairments, Hearing Impairments, Language Disorders, and Motor Speech Disorders. Difficulties will be magnified by mask wearing and social distancing, and may impact speech, language, and social communication.

The Effects of COVID-19 Precautions (Masks, Shields, and Distancing) on Communication

- Masks make voices muffled (higher frequencies may be lost or reduced; lower frequencies are increased);
- Masks cover facial expressions, which convey meaning;
- Masks make it harder to recognize familiar people;
- Masks eliminate the possibility of speech reading (using the shape of the speaker's mouth to figure out which sounds are being made);
- Masks can be uncomfortable for people who wear hearing aids and cochlear implants;
- Masks prevent you from moving your mouth normally (obstruct motor movements);
- Children may have a harder time learning to recognize emotions;
- People who already have difficulty communicating find it even more difficult to communicate in a mask:
- Face shields reflect sound back to the wearer rather than projecting to the listener; and
- Social distancing can also impact hearing, as soundwaves have to travel farther.

Signs Your Students May Have Difficulty Hearing and Processing

- Taking more time to process information and what is being said;
- Choosing not to wear masks or having difficulty keeping their masks on;
- Misunderstanding similar sounding words/instructions;
- Looking confused;
- Appearing very tired by the end of the day;
- Difficulty paying attention and/or tuning out;
- Difficulty following directions;
- Answering questions incorrectly;
- Asking for repetition;
- Poor academic performance;
- Delayed speech and language development;
- Behavioural concerns;
- Performing better in a quieter setting;
- Appearing upset by noise or loud talking;
- Having difficulty remembering information and organizing their possessions and/or work; and
- Easily upset when routines are changed.









Strategies for Teachers to Support Hearing and Auditory Processing

- Give more time for comprehension of spoken information;
- Check for understanding ask students to paraphrase what you have said;
- Make modifications to your classroom or workspace to improve acoustics and reduce competing noises (e.g., felt or rubber caps on chair and table legs, turning off electronic devices when not in use):
- Introduce yourself to students you do not interact with regularly so they know who you are (you
 may wish to use a photo badge to show your face);
- Encourage parents to wear masks at home for short periods of time when reading stories and asking questions so students can practice perceiving sounds through masks in a comfortable environment;
- Practice emotions games and recognizing emotions with masks on;
- Speak more slowly than usual;
- Write down all keywords, topic changes and new vocabulary;
- Include resources such as picture charts, feeling cards, social stories, and visuals;
- Emphasize phonological awareness learning through the use of videos (which provide unmasked, undistorted examples) or OCDSB resources like the Class Act kit;
- Ensure your students can see you and that you have their attention before you start speaking;
- Ask what you can do to help a student hear;
- Use eye, hand, and body movement to add gestures and more information;
- Repeat, rephrase, summarize information often (your own and comments/questions from other students);
- Use a speech-to-text app to transcribe speech in real time;
- Do not shout, as shouting distorts speech sounds;
- Ensure only one person is speaking at a time during group discussions;
- Structure smaller group discussions when possible;
- Use preferential seating; with proximity to the teacher and the better ear towards the class;
- Have headphones available for students who are having difficulty processing information due to excessive noise during virtual learning or independent work;
- Use sequence words such as "first", "second," etc. or verbal cues such as "now you really have to pay attention as this is very important";
- Include accommodations on the IEP;
- Provide a daily classroom schedule (visual or written);
- Watch for signs of mental health issues such as student "shutting down" or not joining virtual meets etc.; and.
- Ensure equipment (e.g., FM systems, hearing aids) is functional at all times.

What To Do When Strategies Are Not Working

- Discuss concerns with parents and/or guardians;
- Refer student to an in-school student success meeting;
- If appropriate, refer to the multidisciplinary team and suggest strategies and/or assessment requirements such as SEA equipment;
- If appropriate, refer the student to the family physician, pediatrician or audiologist; and
- Collaborate with school staff, the student and the family to put supports in place for the student to be successful.









Sources & Additional Resources

Hearing Tip Sheet (Speech-Language & Audiology Canada)

Masks & Communication Tip Sheet (Speech-Language & Audiology Canada)

Listening-Friendly Classrooms Tip Sheet (Speech-Language & Audiology Canada)

Classroom Acoustics (American Speech-Language-Hearing Association)

Unilateral Hearing Loss in Children (American Speech-Language-Hearing Association)

Hearing Loss (American Speech-Language-Hearing Association)

How Wearing a Mask at School Can Impact a Child's Development (CTV News)

Why Do Masks Make it so Hard to Understand Each Other? (Nevada Today)

Masks help more people to detect hearing loss (Korea Biomedical Review)

Masks Protect Health Yet Obstruct Clear Communication (Advanced Brain Technologies)

Improve Communication While Wearing a Mask









Strategies for Students to Support Hearing and Auditory Processing

Self-Awareness	Self-Advocacy	Organization	Technology
 Use fidget tools that help you focus. Understand your learning style and note what you are good at and what is tricky or difficult for you and share this with your teacher. Recognize what makes you anxious and share this information with your teacher/guidance counsellor and/or your parents. 	 Request cards (written or pictures). Ask the teacher to say things again and/or in a different way. Ask for announcements and homework assignments to be written. Practice a script so that you can feel comfortable asking the teacher to repeat information. Take responsibility for your learning. Request a quiet space to help you concentrate and process information. 	 Keep your mask clipped on a lanyard to remind you to wear it and/or have extra masks in your backpack. Keep a copy of your schedule on your desk or in your agenda. Track assignments in your agenda. 	 Use any technology supports you have which can include headphones, A C-pen, Chromebook or FM system. If you have hearing aids, make sure they are working.





