May is Speech, Language & Hearing Awareness Month

Noise in the Classroom

Who is Impacted?
- Noise impacts EVERYONE in the classroom!

Noise greatly impacts students with the following:
- Mild to severe hearing loss (permanent or temporary loss in one or both ears)
- History of recurrent ear infections
- Oral language difficulties
- Attention or behaviour issues
- Learning difficulties
- An auditory processing disorder
- English as a Second Language

Facts:

Did you know that based on studies...
- At least 45% of the learning activities in a classroom require listening and understanding (Berg, 1993).
- For children from 5 to 12 years of age, 45.3% have difficulty differentiating words that sound similar (e.g., “bed” and “bread”) in background noise (Smyth, 1979).
- Due to background noise and poor classroom acoustics, 90% of Grade 1 students are not hearing all of their teacher’s words and one in six words are not understood by the average Grade 1 student in the classroom in Canada (Bradley, 2005).
- In regular classrooms, only 9% of Grade 1 students, 40% of Grade 3 students and 52% of Grade 6 students have optimal classroom acoustic conditions for learning purposes (Bradley and Sato, 2004).
- Teachers are 32 times more susceptible to voice problems (e.g., laryngitis, hoarse voice) than those in similar occupations due to noise in the classroom (ASHA, 2011).

How Does Noise Affect Learning?
- Noise can interfere with understanding and attention in the classroom, which can impact oral language skills, literacy skills, behaviour and motivation.
- Students with weak oral language skills are unable to fill in the blanks when they don’t hear information in the classroom.
- Noise limits the number of verbal interactions in the classroom.
- Less material is covered due to time spent reviewing information that was not heard.
- Teachers are at greater risk for developing a hoarse voice or chronic laryngitis because they often need to raise their volume when speaking in a noisy classroom.

What Causes Noise in the Classroom?
- Ambient noise in the room
  o Fluorescent lights or ventilation systems
  o Doors / windows left open
  o Noisy equipment (e.g. pencil sharpeners, projectors)
  o Moveable furniture that scrapes the floor
  o Adjacent classrooms or hallways
  o Students talking
  o Group work (particularly evident in split grades)
- Classroom structure (ineffective sound barriers)
  o Hard, flat, high ceilings (they allow sounds to reflect)
  o Walls made of concrete, brick or drywall
  o Hard surfaced floor
  o Windows without coverings or hard blinds which reflect sounds

Tips for Reducing Noise in the Classroom
- Keep windows and doors closed.
- Place rugs over the floor where possible.
- Cover windows with fabric curtains.
- Cover unused blackboards and walls with softer materials (e.g., flags, corkboards, artwork, coats).
- Place felt pads or tennis balls on the legs of chairs and tables.
- Encourage the use of headphones with audiovisual equipment (e.g. computer, cd and tape players).
- Avoid dividing the students into groups where one group is listening to audiovisual equipment and the other group is listening to the teacher.
- Use fabric-covered dividers in open-concept classrooms.
- Seat students away from noisy equipment.
- Turn off noisy equipment when not in use.
- Replace buzzing lights immediately.