

FOR IMMEDIATE RELEASE



## Experts Warn of Noisy Classrooms

### ***Audiologists and Speech-Language Pathologists warn of learning problems associated with noise***

OTTAWA (October 1, 2007) - During a press conference on Parliament Hill today, the Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) alerted parents that a noisy classroom can affect a child's ability to learn.

With children back in school for a new year, audiologists and speech-language pathologists advise parents to be aware of the noise conditions in their children's classrooms. Children, who primarily learn through listening, need a learning environment in which they can fully hear and understand the teacher's instructions.

A newly released study found that many classrooms had poor quality acoustics and that children were often working in below standard classroom listening conditions (Rubin, Flagg-Williams and Aquino Russell, August 2007). Results from a Canadian Language and Literacy Research Network study show that one in six words is not understood by the average Grade 1 student due to excessive background noise and poor acoustics in Canadian classrooms.

"It is essential for parents to know that noisy classrooms have the potential to negatively affect their children's learning, particularly for children with learning disabilities, hearing loss or those learning in a second language," said André Lafargue, CASLPA audiologist from New Brunswick "and more importantly, that acoustics in classrooms can be improved to maximize learning."

Speech-language pathologists warn teachers that under poor acoustic conditions, teachers adjust their speech in ways that contribute to voice strain. Studies demonstrate that teachers are over-represented in voice clinics compared to population statistics, comprising up to 25% of total voice clinic caseloads (Titze et al, 1997; Rammage, 2004; 2006). With ongoing vocal strain in poor acoustic conditions, teachers develop chronic voice problems such as muscle tension, hoarseness and vocal nodules. Although voice amplification systems can be helpful, it is critical to ensure that room acoustics, especially reverberation, are optimized before introducing sound field amplification. Teachers often must undergo voice therapy to solve their occupational voice problems.

Audiologists and speech-language pathologists remind parents and school officials that background noise in classrooms is more than just classmates' chatter. Sources of noise and poor acoustics include:

Outside noise sources

- Vehicles, airplanes
- Voices (playground)

Inside sources:

- Student activity
- Equipment: computers, projectors, fish tanks
- Reverberation (echo) of sound within the room due to hard surfaces (uncarpeted floors, walls...)
- Neighbouring classrooms, hallways, gyms, music rooms
- Ventilation and heating/cooling systems
- Classroom lighting systems (i.e. fluorescent lights)

Helpful tips to improve classroom acoustics:

- Make an “x”-slit in tennis balls and place under the legs of chairs and tables in uncarpeted classrooms
- Add hypo-allergenic carpeting and curtains
- When appropriate, soundfield amplification systems in the classroom can benefit students and the teacher’s vocal health
- Replace ballasts from noisy fluorescent light fixtures
- Fix loose or vibrating parts to reduce noise from heating/cooling and ventilation systems
- Move free-standing furnishings to break up sound reflections and isolate areas in large rooms
- Use suspended acoustic ceiling tiles, sound-absorbent panels on upper walls
- Add cork boards to walls

CASLPA President, Linda Rammage urged “that all new schools should be built with consideration of classroom acoustics and existing schools should be assessed and improvements made to address acoustics.”

-30-

**CASLPA**, with more than 5,000 members, is the only national body that supports and represents the professional needs of speech-language pathologists, audiologists and supportive personnel inclusively within one organization. Through this support, CASLPA champions the needs of people with communications disorders. Visit CASLPA at [www.caslpa.ca](http://www.caslpa.ca)

Audiologists are professionals who identify, diagnose (restricted in some provinces), treat, and manage individuals with peripheral and central hearing loss as well as balance problems. Audiologists determine appropriate patient treatment of hearing and balance problems by combining a complete history with a variety of specialized auditory and vestibular assessments. Based upon the evaluation, the audiologist presents, and may implement, a variety of treatment options to patients with hearing impairment or balance problems. Some audiologists dispense and fit hearing aids as part of a comprehensive aural rehabilitative program. Audiology services are integral to a number of comprehensive interdisciplinary assessment/treatment programs. Audiologists are also involved in prevention and research for hearing disorders.

Speech-language pathologists are professionals who are engaged in the prevention, identification, evaluation, assessment, diagnosis, counseling, treatment, management and education of communication and/or swallowing disorders and research in these areas. Communication disorders include disorders of speech, language, voice and fluency in individuals from all age groups. Speech-language pathologists work in various settings such as hospitals, schools, community health centers, nursing homes, childcare facilities, and in private practice. Speech-language pathologists help prevent and rehabilitate teachers with vocal strain and voice disorders.

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