

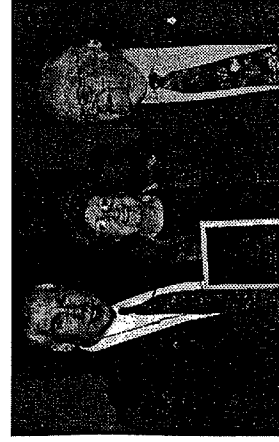
Improving school acoustics

Award-winning Vancouver teacher Tom Tylka puts it this way: "We are wasting mental energy trying to filter out background noise. We could be using that energy to concentrate on learning, both as teachers and as students."

Tom Tylka, a district resource teacher for the deaf and hard of hearing has spent the last few years highlighting the need for better school acoustics. Tom has discovered that simple things can make a big difference for students and teachers, and not just those with hearing loss or deafness. It turns out that improvements in the acoustic environment of schools can benefit everyone, and on a daily basis.

"Things began to improve as soon as we turned our attention to school acoustics," says Tylka. "Two of my students at Oppenheimer School noticed

that their hearing aid links to the teacher's microphone did not function in certain parts of the classrooms and library." Because of this fortuitous complaint, Tylka, with help from Vancouver Coastal Health Authority senior audiologist Dan Paccioretti, was able to pinpoint the electromagnetic interference emanating from overhead fluorescent lights as the culprit.



Tom receives the WIDHH award of distinguished service accompanied by his UBC graduate professor Dr. B. Clarke and wife J. Clarke, April 2003.

called ballasts, which emit audible background noise even when new. Tylka has discovered that the humming ballasts can be replaced with slightly more expensive, but more energy efficient electronic ballasts, which are virtually silent, and do not interfere with FM hearing aids connecting hearing-impaired students with their teachers.

Light ballast replacement has taken place at Douglas and Oppenheimer schools, and immediate benefits have been realized. The lowering of ambient noise levels helps students with hearing loss, and everyone else enjoys the quieter background as well, making it easier to hear and converse.

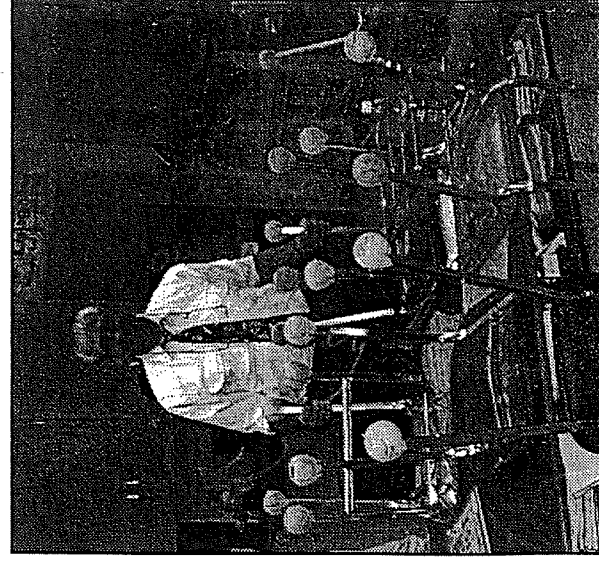
Tylka says we need to examine school environments for other sources of distracting noise, such as the wall-mounted ventilation units in many classrooms. Teachers might not realize that the units are causing acoustic problems, and can be shut off if necessary.

Opening a door and a window can be just as effective, and a lot quieter.

Tylka has documented noise problems that are significant enough to cause teachers to leave the profession unnecessarily. Humming lights and roaring ventilation units contribute to the problems associated with hyperacusis, a debilitating sensitivity to sounds of all kinds. With very little effort, ambient noise levels can be reduced, and the teaching and learning environment can be improved for all school inhabitants, particularly if school renovations and construction of new classrooms take advantage of what is known about acoustic properties of lighting, air ventilation, and sound-dampening construction techniques.

The reduction of ambient noise in schools has become a goal for Tom and a group of educators who have formed the School Noise Action Group, or SNAG. This organization is now entering its second year and consists of representatives from the Canadian Association of Educators of the Deaf and Hard of Hearing, the Vancouver Coastal Health Authority, the University of British Columbia, VSB teachers and administrators, and the Health and Safety officer from the BCTF. The group, which meets once a month at UBC, has begun to serve as a source of information and advice for VSB schools and staff. They can be reached by

emailing Murray Hodgson at hodgson@mech.ubc.ca.



Tom shows off the Tylka Tennis Ball Treatment at Douglas school.

Tom Tylka started teaching in 1977 in Manitoba. He moved to Vancouver in 1988, and has been supporting deaf and hard of hearing students as a resource teacher ever since. In 1990, Tom began introducing sound enhancement technologies to teachers, and obtained FM free-field amplification systems for a number of pilot projects, including the computer lab of Moberly School.

Since that time, Tom has been able to support students from elementary through to Grade Twelve, and he is understandably proud of his students' achievements. He was recently invited to the graduation ceremonies of hearing impaired students who are now successfully pursuing such careers as computer specialists, welders, beauticians, and pharmacology students.



Tom and Moberly principal Mark Proctor, who helped Tom implement many of his sound improvement ideas.

Through his work in the Connections program at Killarney Secondary school, Tom has energetically pursued opportunities for students who, in previous times, would have been relegated to a less productive role in society due to hearing and visual challenges.

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Two of Tom's former students, Wilson Li and Lavine Lal, nominated him for the annual distinguished service award from the Western Institute for the Deaf and Hard of Hearing (WIDHH) in April of this year. There is a special significance in this for Tom as these two students have themselves overcome large barriers to achieve academic and occupational success.

The WIDHH award was presented to Tom in April in recognition of his efforts to make a difference in the lives of deaf, deafened, and hard of hearing individuals in B.C.

Tom, along with the School Noise Action Group, continues to find ways to improve school acoustics. At Douglas and Cook schools, Tom has introduced the technology of the recycled tennis ball, slit with a knife, and popped on the feet of chairs and desks. On linoleum floors, this quieting technique provides instant relief from crashing and grinding chairs, and polishes the floor at the same time. This kind of down-home sonic improvement is typical of the Tylka "we-can-make-a-difference" approach.

VESTA news congratulates Tom for his WIDHH award. We will all benefit from adopting the acoustic improvements he is recommending.



Tom delivers a set of newly laundered tennis balls to a classroom at Cook school.