

# SOUND. THAT WORKS.™ IN SCHOOLS



Recent studies have drawn attention to the less than acceptable acoustical conditions in many schools.

Noise intrudes from both interior and exterior sources, affecting speech intelligibility in the classroom. When students can't hear clearly, they strain to listen to their teacher's words, which reduces their ability to focus on understanding the lesson. Noise can also cause minds to wander off completely.

That's why several countries, including Australia, Canada, Sweden, and the United States, have developed standards to address classroom acoustics.

While learning is the primary activity that schools host, they also accommodate administrative, nursing and counseling offices, as well as staff rooms. The activities that take place in these areas have different acoustical needs.

Telephone or in-person conversations between students, parents and staff members can involve academic, health and financial information, as well as other sensitive topics. Even if these conversations are brought into closed offices, doors and even slab-to-slab walls are usually not enough to ensure speech privacy. Minor gaps or penetrations can provide clear paths for overhearing discussions that should be confidential.

Furthermore, the acoustics in other areas, such as libraries and computer labs, can impact academic performance as much as those in classrooms. In these areas, conversations and noises are distracting to students engaged in activities that require a high level of concentration, such as reading, writing or studying.

Help staff  
and students  
focus on tasks  
that involve a  
high level of  
concentration.

## Using Sound Masking in the Classroom?

As a general rule, classrooms wouldn't benefit from sound masking because it would decrease students' ability to hear their teacher.

Children under the age of fifteen have been shown to be particularly inefficient listeners. When contending with high noise levels, they tend to tune out speech. Also, because their language development hasn't matured, they lack the experience required to 'fill in the gaps' or put what they do hear into context.

The detrimental impact of noise is cumulative. Over time, children demonstrate difficulty with speech recognition, reading and comprehension, as well as poor long-term memory. These problems can present additional obstacles for children with learning exceptionalities. Lastly, if a student

is unable to hear their teacher it can cause frustration and anger, reducing their motivation to learn.

When noisy classrooms cause teachers to speak louder and repeat instructions, it puts them at risk of suffering from voice fatigue. They may be less likely to speak to students at length and may not always read aloud, which affects the learning experience. Additional concentration is required of teachers in order to listen to students' questions and responses. Working in this type of environment on an ongoing basis can be stressful and tiring.

A voice amplification system can be of benefit in these settings. This technology allows the teacher to use a normal voice level and be easily heard throughout the classroom.

## The LogiSon® Solution

The LogiSon Acoustic Network is part of a proactive approach to providing students and staff with the comfortable environment they need to excel.

This technology distributes a soothing background sound throughout a facility. Although most often compared to softly blowing air, the sound is professionally tuned to an independently-proven masking spectrum that's designed to cover speech, increasing privacy. It also masks incidental noises that would otherwise affect comfort and concentration.

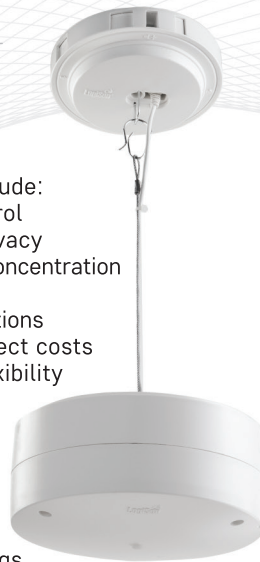
If paging and music are needed in particular areas, the LogiSon Acoustic Network can provide these functions concurrently with the masking sound.

Benefits include:

- Noise control
- Speech privacy
- Improved concentration
- Paging and music functions
- Lower project costs
- Facility flexibility
- Quick ROI

Networked architecture provides the flexibility to adjust settings as needs change, without incurring significant cost or disruption to operations.

For more information about the system's advanced features, see our brochure or contact your local LogiSon Representative.



## Colleges & Universities



As colleges and universities are increasingly competing for funding, students and faculty researchers, they're also working to improve the design of their facilities in order to stand out.

### Libraries

Libraries serve many functions with various acoustical needs, which can pose challenges to conventional noise control methods and affect staff's ability to enforce a policy of silence. Although certain areas may be allotted to particular activities, they might be located near an area in which other types of activities—with different acoustical needs—are taking place.

### Research Laboratories

Following the precedent set by private-sector research laboratories, many post-secondary institutions now favour open-concept floorplans. These large, open spaces are designed to encourage collaboration between researchers and across disciplines, and feature modular furniture that can easily be moved to accommodate different types of work. The acoustical issues created by this kind of space, and the number of occupants sharing it, are similar to those experienced in open-plan offices.

### Residential Buildings

A number of institutions combine learning and living spaces—a strategy that's shown to reduce dropout rates while maximizing the use of valuable real estate. Residential buildings now house classrooms, computer labs and faculty offices, as well as dorm rooms, creating a diverse acoustical landscape. Without the appropriate treatments, students may find it difficult to concentrate in this type of environment, impacting their academic performance. Because students spend a lot of time working in their rooms, quality housing is one of the factors that attract them to a particular institution.

### Faculty & Healthcare Offices

Faculty and healthcare offices also benefit from improved speech privacy and noise control.

## A Few of Our Educational Clients

FANSHAWE COLLEGE • FREEMAN SCHOOL OF BUSINESS • KATHARINE GIBBS SCHOOL  
LAKE ARROWHEAD SCHOOL DISTRICT • NORTHWESTERN UNIVERSITY • TRINITY UNIVERSITY  
UNIVERSITY OF MANITOBA • UNIVERSITY OF MINNESOTA • UNIVERSITY OF TORONTO