

Today's libraries serve many functions beyond lending books. They host study groups, workshops, meetings, social events, and makerspaces, and offer access to computers, printing services and other tools. These facilities also retain their core role, which is to provide patrons with reference materials and a comfortable environment in which to read, write and study.

Unfortunately, these activities don't always mix well when it comes to acoustics. At the same time, they make it more challenging for staff to enforce a policy of silence. In any case, even if patrons try to keep unnecessary noise to a minimum, any noises that remain in the space are there by necessity and must be addressed through design.

However, the predominantly open environment poses challenges to conventional noise control methods. Although certain areas may be allotted to particular activities, they're often located near an area in which other types of activities—with different acoustical needs—are taking place. Even closed rooms don't always provide the expected level of noise control.

Conversations and noises are highly disruptive to patrons who are engaged in tasks that require concentration.

Speech privacy is yet another acoustical concern because the facility also houses the library's business operations. Privacy is required for discussions involving staff, patron-related issues, financial information, and other sensitive topics.

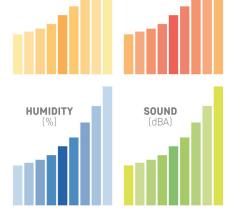
Creating an effective acoustical environment ensures the facility is well-suited to the various demands being placed upon it.

an environment
that successfully
marries traditional
uses with new and
ever-expanding
services.



The Quest for Silence

LIGHTING



TEMPERATURE

The importance of providing a quiet setting is often personified by the image of a librarian raising her finger and whispering 'Shush.'

However, the 'pin drop' environment traditionally associated with libraries

actually isn't the best for acoustical control. Although well-intentioned, it's impossible to eliminate all noises from a busy environment. Furthermore, the more silent one tries to make a space, the louder the remaining noises seem to occupants.

This phenomenon can be attributed to the fact that an effective acoustic environment relies on the provision of an appropriate level and spectrum of background sound. If the background sound level is too high, the environment is irritating and tiring. If it's too low, noises are easily overheard, compromising concentration. A low level also means that conversations can be clearly heard from afar; voices may carry intelligibly over a distance of 30-50 feet (9-15 meters) or more.

In other words, just as with other ergonomic factors such as lighting, temperature and humidity, there's a comfort zone for sound—and it isn't silence.

The LogiSon® Solution

The LogiSon Acoustic Network 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.

Because it isn't a physical barrier, this technology maintains line of sight into child and youth areas, and provides patrons with comfortable spaces where they can focus while still feeling like part of the community.

If paging and music are needed in particular areas, the LogiSon

Acoustic Network can provide those functions concurrently with the masking sound.

Benefits include:

- Improved noise control
- Increased speech privacy
- Improved concentration
- Paging and music functions
- Lower project costs
- Facility flexibility
- Quick ROI

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

A Few of Our Library Clients

BUSAN LIBRARY • MISSISSAUGA CENTRAL LIBRARY • NATIONAL INSTITUTES OF HEALTH (NIH) LIBRARY NATIONAL LIBRARY AND INFORMATION SYSTEM AUTHORITY (NALIS) • TORONTO PUBLIC LIBRARY YORK UNIVERSITY LIBRARIES

Case Study



National Institutes of Health Library Bethesda, Maryland • USA

Founded in 1887, the National Institutes of Health Library (NIH) forms part of the United States Department of Health and Human Services. The NIH is the federal focal point for medical research in the United States and is one of the world's foremost medical research centers. Its goal is to acquire new knowledge to prevent, detect, diagnose and treat diseases and disabilities from the common cold to rare genetic disorders.

Problem

A frequently used training room is located immediately adjacent to study tables, reference areas and carrels. Whenever a conference or training session was in progress, the voices and other noises coming from this room disturbed patrons using the reference/study area, even when the room's door was closed. Because the ambient levels in this area were low (36 to 38 dBA), conversations occurring in the immediate area could also be overheard, causing even more distractions.

The area features a low-level absorptive ceiling and 2 x 4-foot light fixtures with acrylic lenses. The training room's walls do not extend above the suspended ceiling and are hard surfaced. The floor is carpeted to reduce footfall and the bookshelves hold reference materials, which provides the space with some measure of absorption.

Solution

The LogiSon Acoustic Network was installed throughout the reference/study area. It increased ambient levels to about 46 dBA. Noises originating in the training room are less disruptive to users of the reference/study area and conversations are less disruptive within this area as well.

