

Making Schools Healthy for Students and Staff

The Tools for Schools program helped this district improve indoor air quality without breaking the bank.

By Jack B. Levine



Superintendents and boards of education more often than not choose “books over bricks” and our repair and maintenance budgets usually are lower than what we need. However, we all recognize the importance of healthy schools for students and staff. Is there a way to improve the condition of our school buildings without spending a lot of money?

Yes, it is possible. Amity Regional School District 5 in Connecticut went from being the poster child of poor indoor air quality to a nationally recognized model of sustained excellence of indoor air quality.

In 2001, the quality of the learning environment in the Amity Regional School District came into question when staff and students began to experience a variety of health complaints they blamed on airborne mold and mildew.

The October 28, 2002 *New Haven Register* carried an article headlined, “Cancer Scare Hits Amity, State Agency Reviewing 31 Cases.” An article two days later reported that “More than 150 Amity parents, students, and alumni attended a public forum about possible cancer clusters.” The article included a number of quotes from concerned parents, students, and staff, such as, “I’m very concerned for their safety. If it’s that bad, then the students should not be in the school,” and

“It’s disgusting to hear that Amity gave people the run around. People shouldn’t be afraid to breathe in school.”

Taking Action

After five superintendents in five years, the board of education hired a new superintendent of schools in October 2004 under whose leadership the district implemented the EPA’s Indoor Air Quality (IAQ) Tools for Schools (TfS) program. A new director of finance and administration was hired in July 2005 and put in charge of the program, which has become successful despite initial skepticism from the district staff about the administrators’ commitment to improving the schools’ environmental quality.

- The director of finance and administration
- Provides leadership and overall direction to the IAQ TfS program.
- Attends all school-based IAQ committee meetings.
- Tracks IAQ activities and makes sure the appropriate actions are being taken in a timely manner.
- Develops and updates procedures and forms for reporting with the assistance of the IAQ committee members and follows up on all indoor air quality issues.
- Provides periodic status reports to the superintendent of schools and the board of education.
- Constantly emphasizes the goal and value of healthy and safe school buildings to all stakeholders.

Each school building has a school-based IAQ TfS committee made up of one or more teachers, the head custodian, a nurse, a support staff representative, a parent, the principal or assistant principal, the director of facilities, the building maintainer, the facilities coordinator, and the district’s director of finance and administration. Teachers, support staff and parent are chosen based of their high interest and enthusiasm for healthy and safe schools.

The school-based IAQ TfS committee meets at least bi-monthly, at which time the director of facilities provides an update on on-going cleaning and maintenance activities as they relate to indoor air quality (e.g., status

of fixing leaky roofs). Committee members are encouraged to question and comment on problems or concerns. Thus, specific issues are raised, problems are identified, and a game plan is put into place to address the concerns in a systematic way. Committee members also serve as a sounding board for their colleagues, and in this way, providing valuable feedback.

Standard Operating Procedures

The standard operating procedures (SOP) were developed and distributed throughout the district in September 2005. The SOP provides a systematic way to solve problems and communicate relevant information to stakeholders. Basically, the process is as follows:

1. Teachers are encouraged to report indoor air quality concerns through an online work request system or by completing an indoor air quality survey/employee interview form that can be submitted confidentially directly to the school administrator, school nurse, and/or district IAQ coordinator.
2. If a report is filed, a “SWAT Team” consisting of the district IAQ coordinator, director of facilities and/or in-house maintenance employee, head custodian, school nurse (if appropriate), and school administrator (if available), will visit the classroom. If at all possible, the teacher who filed the report is present.
3. The classroom is thoroughly scrutinized by using a checklist in an effort to determine the cause of the problem. In some cases, it is an easy fix (e.g., raise or lower the classroom thermostat to make the environment more comfortable). In other situations, the solution may require hiring an outside contractor if the in-house maintenance employee cannot handle the job.
4. The entire classroom (walls, desks, chairs, tables) is sanitized in the evening or on the weekend using a 10:1 solution of warm water to bleach. All surfaces are dusted, filters are changed (unless it was done within the past month), and the air flow, temperature, and carbon dioxide level are checked.
5. In most situations, these actions eliminate the problem to the satisfaction of the teacher. In some cases, the local health district is contacted to send an environmental inspector to meet with the teacher and inspect the facility. Findings are reported to the teacher and the recommended action plan is implemented.

Teachers who report the indoor air quality concerns are informed by email or verbally of all the actions taken and is asked if they are satisfied with the resolution. If not, the district continues to look for a solution, which could include hiring an industrial hygienist, if necessary.

A Cost-Effective Solution

The Amity School District has the same financial constraints as any other taxpayer-supported entity. District

staff members try to head off costly problems from unhealthy or unsafe buildings (i.e., high absenteeism and low morale, respiratory illnesses, lawsuits) by implementing a comprehensive preventive maintenance program.

In January 2005, the district hired an in-house maintenance employee who has saved the district money by doing many tasks previously done by expensive outside contractors. In addition, custodians have the tools and training to properly clean the facilities so mold is less likely to be present. Thus, the district avoids expensive remedial actions such as hiring an industrial hygienist and restoration cleaning firm.

In the fall of 2005, the Amity School District worked with a cleaning consultant to develop a comprehensive custodial service analysis. In brief, data were collected, including the number and types of furniture and fixtures, flooring, windows, and so forth. Floor plans were studied and current cleaning equipment and supplies were reviewed.

Detailed lists of activities for both cleaning (e.g., empty trash cans) and non-cleaning (e.g., raise the flag) with frequencies (e.g., 5 days per week) were developed. The information was entered into a computer model that had standard industry times for school facilities. From this information, the computer program calculated the number of cleaning hours per full-time equivalent employee, the number of non-cleaning hours per full-time equivalent employee, the number of square feet cleaned per employee, and the recommended number of full-time equivalent employees.

In addition, the consultant recommended specific equipment (e.g., auto scrubbers, dust control burnishers, backpack vacuums) to improve the cost-effectiveness of the cleaning. Thus, the district enhanced the overall cleaning, lowered the cost by eliminating one vacant custodial position, and improved the morale of the custodians by providing the necessary training and equipment.

This was a unique solution to the financial issue of higher cleaning costs related to salaries and benefits, custodial equipment and supplies, aging buildings, and so forth, which must be addressed to have healthy and safe school buildings.

All school business officials recognize the cost-benefit of healthy schools, such as fewer respiratory and asthma cases, lower absenteeism, and higher morale. Some of us may feel paralyzed by limited funds and end up not doing very much to fix the problems with our school buildings. With the EPA Indoor Air Quality Tools for Schools program, we can provide healthier school buildings to our students and staff at a low cost.

Jack B. Levine is director of finance and administration for Amity Regional School District No. 5 in Woodbridge, Connecticut. Email: jack.levine@reg5.k12.ct.us