

PUTTING THE PIECES TOGETHER:  
A SCHOOL LEADER'S GUIDE TO HEALTHY  
INDOOR ENVIRONMENTS

# AASA Superintendent Issue Briefs

Vol. 1, No. 1–6

The American Association of School Administrators' "Putting the Pieces Together: A School Leader's Guide to Healthy Indoor Environments" identifies six challenges that districts face when addressing indoor environmental quality, which we will refer to by its acronym, IEQ. These challenges are:

- (1) Maintaining strong leadership;
- (2) Dealing with overcrowding;
- (3) Increasing awareness of indoor environmental quality and ensuring IEQ is an ongoing priority;
- (4) Implementing effective communication strategies;
- (5) Overcoming financial barriers; and
- (6) Creating networking opportunities.

These challenges are discussed in the following six Superintendent Issue Briefs. Each brief focuses on a particular challenge's impact on IEQ.



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# Maintaining Strong Leadership on Indoor Environmental Quality (Vol. 1, No. 1)

AT THE CORE of every successful indoor environmental quality program is strong leadership at every level of the school district — superintendent, school board, health staff, facilities staff and building staff. Leadership training and education are necessary regardless of the size or location of the district.

## The Challenge

High superintendent and staff turnover rates are problematic in many urban school districts and can create sustainability challenges for new IEQ management plans, policies and other health-related environmental initiatives. Therefore, ensuring that several administrators are charged with the district's IEQ plan can offset the impact of high turnover rates.

On the other hand, rural superintendents wear numerous hats to meet the demands of state and federal initiatives and manage local politics, all while ensuring students receive the highest quality public education. IEQ leadership in rural districts involves much multitasking and excellent planning and organization since those charged with IEQ are often charged with a wide array of tasks.

## Leadership's Effect on IEQ

### Academic Achievement

Leadership has long been linked to student achievement and, in the context of IEQ, leadership's positive expectations at every level — superintendent, teachers, facilities staff, etc. — can improve the quality of the learning environment and the ability of a student to achieve. Leaders should learn and share how IEQ affects academic achievement and develop an action plan for short- and long-term priorities. Near-term priorities might include reducing the distraction of a noisy HVAC system, which improves students' ability to hear teachers, or improving lighting, which eases students' ability to read the board. Longer-term improvements in indoor environmental conditions may result in greater learning and greater retention of course content.

As academic achievement relates to indoor air quality, growing evidence suggests that improving outdoor-air ventilation rates can improve student and teacher performance, increase test scores, and reduce airborne transmission of infection. In one study, students in classrooms with higher outdoor-air ventilation rates scored 14 to 15 percent higher on standardized test scores than children in classrooms with lower outdoor-air ventilation rates.

### Liability

An estimated 50 percent of the nation's schools have problems with indoor air quality. With nearly 56 million people, or 20 percent of the U.S. population, spending their days inside elementary and secondary

schools, indoor environmental problems in schools are a significant concern. School system leaders' liability concerns for IEQ problems, such as asbestos or mold removal, often become a huge driver in IEQ management. School leaders can take four primary actions to prevent or reduce IEQ liability and litigation and concomitant public relations issues: (1) Investigate – Collect and address all IEQ complaints stemming from all members of your district. Revisit district's IEQ policies and practices periodically to ensure the IEQ complaint/response collection system is working well. (2) Respond – Prepare a response on all IEQ complaints and ensure the response is handled quickly and thoroughly. (3) Strategize – Address all IEQ issues and work diligently to make sure problems do not worsen. (4) Communicate – Encourage all students, staff and personnel to report any IEQ issues to the appropriate person and keep all groups connected to the changes made.

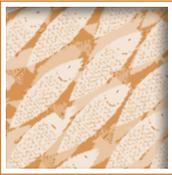
## Professional Development

Professional development of district leaders is an important component of IEQ plans and should include strategies to build awareness with staff, elected officials and other public figures. District leaders can tap the knowledge of the American Association of School Administrators staff and review the IEQ resources identified in these Issue Briefs. Practical knowledge tied to specific district concerns allows district leaders to speak authoritatively when contacting elected officials and other public figures on vital education issues and legislation related to indoor environmental quality.

Professional development of district staff should include helpful tips on how to improve IEQ, report IEQ problems, and facilitate quick corrective action.

## SOURCES:

- American Association of School Administrators. "Indoor Air Quality Resource Collection." 2009. Available at: [www.aasa.org/iaq-resources.aspx](http://www.aasa.org/iaq-resources.aspx).
- National Research Council. Linking Green Schools to Health and Productivity Outcomes Plausibly Related to Green Schools." *Green Schools Attributes for Health and Learning*. National Academies Press: Washington, D.C. 2006.
- Tobin, Paul. "A Rural Superintendent's Challenges and Rewards." *The School Administrator*. March 2006. Available at [www.aasa.org](http://www.aasa.org).
- U.S. Environmental Protection Agency. "How Does Indoor Air Quality Impact Student Health and Academic Performances? The Case for Comprehensive IAQ Management in Schools." April 2010.
- U.S. General Accounting Office. "School Facilities: Condition of America's Schools." Health, Education and Human Services Division: Washington, D.C. February 1995.
- Yarup, Sean. Environmental Safety Coordinator, Montgomery County Public Schools. Personal Interview. February 2010.



# Dealing With Overcrowding to Improve Indoor Environmental Quality (Vol. 1, No. 2)

## Overcrowding and IEQ

AS DISTRICTS GROW or consolidate, buildings are constructed or renovated for accommodations. These structural changes affect the quality of the buildings and most importantly, the health, learning and productivity of students and staff. Overcrowded schools are more likely to have inadequate or substandard electrical and lighting systems; safety issues; and outdated heating, ventilation and air conditioning (HVAC) systems, floors and foundations. Therefore, students in overcrowded schools pay less attention and achieve less. In turn, districts should collect information to know where the problems are; monitor school overcrowding so conditions get better and not worse; and act, through policy, to correct problems as soon as they occur.

To deal with overcrowding, districts often:

- Fill the playground with portable classrooms.
- Convert gymnasiums, libraries, computer labs, special education rooms, teachers' workrooms and storage areas into classrooms.
- Bus students to less-crowded districts.
- Adopt year-round, multitrack schedules where students and teachers rotate being in school and on vacation at different times during the year.

## Portable Classrooms

A "portable" is considered to be a structure smaller than 2,000 square feet.

### Benefits of Portable Classrooms

Portable classrooms are used as a quick and relatively inexpensive solution to many challenges schools encounter.

- Portables relieve overcrowding in original school buildings and reduce the student-to-teacher ratio.
- Portables allow temperature and air-conditioning settings to be controlled on a room-by-room basis.
- Portable classrooms allow school districts to provide extra space quickly, as they can be assembled quickly and moved easily from one site to another.

### Common Concerns About Portable Classrooms

Criticism of portable classrooms spans a range of concerns, from aesthetic complaints to poor air circulation. Issues of overcrowding in schools and potential health risks associated with portables have received attention in recent years. Common problems with portable classrooms include:

- Poorly functioning HVAC systems that provide minimal ventilation with outside air.

- Poor acoustics from loud ventilation systems.
- Poor air quality because chemical off-gassing from pressed-wood and other high-emission materials are often used in portables.
- Water entry and mold growth.
- Site pollution from nearby parking lots or loading areas.

### Recommendations for Schools Using Portables

For schools choosing to lease or purchase portable classrooms, the following steps can help maintain a healthy indoor environment.

- Train facilities and maintenance staff to maintain portables and conventional classrooms properly and consistently.
- Establish a schedule for replacing filters, checking vents, dampers, moisture levels and so forth.
- Ensure the portable's HVAC system is designed and operated to provide a minimum outdoor-air ventilation rate consistent with ASHRAE Standard 62.1, which for classrooms is about 15 cubic feet per minute of outdoor air per person. Outdoor air should be provided continuously when a classroom is occupied.
- Prior to occupancy, operate HVAC systems at maximum outdoor-air intake rate for several days to flush out pollutants.
- Specify and request particle board that is free of urea-formaldehyde resins.
- Identify which windows may be opened by occupants to provide fresh-air exchange and natural ventilation as a supplement to the mechanical ventilation provided by the HVAC system.
- Place portables away from sprinkler systems and other sources that can lead to excessive moisture or collection of rainwater around the foundation.
- Locate portables away from areas where vehicles idle.

### SOURCES:

- U.S. Environmental Protection Agency. "Effective Facility Maintenance for Healthy, High Performance Schools." April 2006, Vol. 4. Available at [www.epa.gov/iaq/schools/pdfs/publications/facilities\\_bulletin.pdf](http://www.epa.gov/iaq/schools/pdfs/publications/facilities_bulletin.pdf).
- U.S. Environmental Protection Agency. "Portable Classrooms" Indoor Air Quality Design Tools for Schools. January 2010. [www.epa.gov/iaq/schooldesign/index.html](http://www.epa.gov/iaq/schooldesign/index.html).
- University of Los Angeles. "Issues: Overcrowding." UCLA Institute for Democracy Education and Access. October 2008. Available at <http://idea.gseis.ucla.edu/resources/issues/overcrowding>.



# Increasing Awareness of and Prioritizing IEQ Concerns (Vol. 1, No.3)

INCREASING AWARENESS of the need for good indoor environmental quality and making it a priority are critical to developing and maintaining the motivation to sustain IEQ efforts. AASA has the following tips to keep indoor environmental quality on the forefront.

## Increasing Awareness

### 1. Put IEQ Goals and Objectives in Writing.

List your program goals, plans and responsibilities in the district's key documents including the strategic plan, facility operations plans, staff training programs and operating manuals. Articulate program goals and objectives clearly and publicly so they become accepted yardsticks for district performance. Relate goals to expected results, for example to decreased response time for IEQ concerns, decreased number of complaints, improved occupant satisfaction, decreased absences and improved student performance.

### 2. Build an Effective Team that Represents the District and Community.

Create champions and recruit members whose job functions, passions, interests and knowledge equip them to act on IEQ management issues (i.e., facility managers, custodial supervisors, HVAC technicians, and business officials). Communicate the importance of IEQ management efforts to key groups (i.e., nurses, public health officials, principals, concerned parents); influence decision makers (i.e., department heads, board members) or make required decisions, such as staff and resource allocations; and provide expertise on IEQ issues and the interaction between facilities management, occupant behaviors, and IEQ outcomes. Experts could be industrial hygienists or environmental health specialists.

### 3. Be Transparent and Inclusive.

Be transparent when communicating assessment findings, responses and prevention plans. Be inclusive when planning the district's IEQ program to build understanding, trust and support. Invite parents, the media, health department officials and others to examine problems and be part of the solution.

### 4. Share Goals, Communicate Results and Solicit Input.

Share information on district efforts and the results so the community can understand the full circle of IEQ management — risk identification, action, prevention and improvement — and see why IEQ investments and behavior/policy changes are worth supporting.

### 5. Educate and Train Staff and Students on IEQ Risks.

Include leadership and stewardship messages in district professional development programs. Convey that

facility health is a joint responsibility and that it takes a team of pro-active administrators, staff and managers to prevent problems and deliver outstanding learning environments. Turn staff and students into on-site facility managers, inspectors and planners by training them to monitor IEQ risks and take simple actions to prevent problems (e.g., wipe up moisture spills immediately, store foods in tight containers, and do not allow pets in classrooms).

### 6. Solicit Feedback.

Periodically ask for input on the district's program's effectiveness to improve community relations and gather valuable data. Ask for feedback on comfort with your IEQ program, the ease of reporting concerns, perceived effectiveness of response to reports and satisfaction with the indoor environment.

## Establishing Priorities

### 1. Order the Importance of Your Short-Term and Long-Term Activities.

Prioritize the most serious risks, such as chemical releases and carbon monoxide and carbon dioxide build-up, and those that can lead to high-cost repairs, such as untended moisture leaks, as first-order activities.

### 2. Keep Staff and Students Satisfied.

Promptly respond to occupant concerns to demonstrate that concerns are taken seriously. Tell complainants what the plan to respond to concerns is, share data, and inform them when and how concerns will be resolved.

### 3. Start Small and Work in Stages.

Continuously plan prevention and upgrade activities, recognizing that you cannot do everything all at once. Some districts begin with a pilot project. Others act on all of the upgrades they can handle in-house at low cost and later move onto more complex tasks, like equipment replacements. Identify action steps, set a schedule, follow the work plan, and track the district's progress.

### 4. Plan for the Future.

Design operations to ensure future IEQ protection and continued best-management practices. Planning should address everything from IEQ for renovation and new construction to training and communication plans to keep staff and district stakeholders up-to-date on IEQ policies and results.

## SOURCE:

U.S. Environmental Protection Agency. "Envisioning Excellence — The IAQ Tools for Schools Program Change Package." [www.epa.gov/iaq/schools/pdfs/excellence/change\\_package.pdf](http://www.epa.gov/iaq/schools/pdfs/excellence/change_package.pdf).



# Implementing Effective Communication Strategies on IEQ (Vol. 1, No. 4)

EFFECTIVE COMMUNICATION can raise the awareness of the health impacts of good (or poor) IEQ and help staff identify and prevent existing or potential IEQ problems. Communication essentials include: support from administrators and school board; good community relations; reassurance from school staff to parents and students; and recognition from the U.S. Environmental Protection Agency through Great Start, Leadership, and Excellence Awards.

## Implementing an Internal Communication Strategy

**Preventative:** Communicate the district's IEQ plans and policies at staff meetings and through internal brochures, pages in the employee handbook, internal newsletters and fact sheets.

**Responsive:** Provide staff with a clear explanation of the IEQ situation and the proposed response. Gaining staff support about problem areas will increase trust and willingness to participate in resolving the issue. Discuss what staff can do to ensure additional IEQ problems will not arise in the future (e.g., keep air vents and windows free from obstruction, report any sign of moisture or mold growth).

## Implementing an External Communication Strategy

**Preventative:** Send correspondence to families. Encourage schools to organize community activities, such as a volunteer drives, health fairs and educational workshops to foster community ownership for the school or school district's IEQ program.

**Responsive:** Annually provide staff and parents with information on the district's procedures for receiving and investigating health and safety concerns.

## Developing the District's IEQ Communication Plan

A written communication plan is typically developed by the superintendent and the school board and managed by the district's public relations and community development office or equivalents under the superintendent's supervision.

### 1. Develop Communication Plan Goals.

- Build and maintain staff and community confidence in the school and the school district's ability to respond to, and effectively manage, an IEQ investigation.
- Rapidly provide staff, the community and the media access to accurate, consistent and comprehensive information about the IEQ investigation.

- Address rumors and inaccuracies as quickly as possible.
- Consider diverse audience needs in providing accessible information.

### 2. Identify Communication Plan Elements.

- **Pro-active Education:** Prepare staff, supporting partners and community with information on the district's IEQ investigation protocol to minimize rumors and inaccuracies.
- **Response Planning:** Planning efforts include clear communication and message approval channels to ensure rapid information dissemination to key partners, staff, students and the community.
- **Special Population Messages:** Develop messages and communication channels for parents/children, non-English speakers and community groups.
- **Frequently Asked Questions:** Establish systems and methods for rapidly identifying, tracking and responding to staff, student, community and media concerns and questions.
- **Ongoing Communication Dissemination and Resources for the Public:** Ensure staff are up-to-date on all aspects of any complaints and investigations and that they are aware their concerns are being taken seriously. Provide fact sheets, community education materials, media education and outreach, and a community emergency information line.

### 3. Define Principles Governing Risk Communication.

To communicate IEQ risks and response, a district should adopt a policy of full disclosure, providing a detailed account of what is being done to identify and address IEQ concerns. Staff and community communications should detail the steps the district will take to improve IEQ for current circumstances and steps to prevent future risks. When presenting this information to staff and community, information should be in non-technical language and free of jargon and acronyms. IEQ, maintenance and administrative departments should collectively work together on risk communications.

#### SOURCES:

- Patrick, Glen. "Responding to Indoor Air Quality Concerns in our Schools." Washington State Department of Health Division of Environmental Health Office of Environmental Health and Safety. June 2005.
- U.S. Environmental Protection Agency. "Indoor Air Quality Tools For Schools Communications Guide." [www.epa.gov/iaq/schools/pdfs/publications/communicationsguide.pdf](http://www.epa.gov/iaq/schools/pdfs/publications/communicationsguide.pdf).



# Overcoming Financial Barriers to Improve Environmental Quality (Vol. 1, No. 5)

IN THE PUBLIC SECTOR, two popular mechanisms for financing indoor environmental quality projects are performance contracts and tax-exempt lease-purchase agreements. Both mechanisms provide effective alternatives to traditional debt financing and may allow payment for energy efficiency upgrades by using money that is already set aside in a district's utility operating budget. By spending only operating budget dollars, the cumbersome capital budget processes may be avoided altogether. Both mechanisms also allow drawing on dollars saved from future energy bills to pay for new, energy-efficient equipment and IEQ projects today.

## Budgeting and Prioritizing

To address the costs associated with IEQ-related renovations and repair, districts should create a strategic plan prioritizing IEQ initiatives and estimating costs of actions needed at each school. Each year the board should allocate resources as appropriate depending on the urgency of IEQ projects and available funding. Some problems can be fixed for little or no cost, such as making sure air vents are not blocked and replacing filters. Other fixes, such as replacing a ventilation system or removing old carpets, may be more costly.

To minimize costs, districts should look for ways to incorporate air quality projects into existing budgets. IEQ actions may be tied to school renovations or other improvement projects. The board also should consider the potential savings, such as increased energy efficiency, that may result from the initial expenditures. Although it may be necessary to re-examine some IEQ projects in times of extreme fiscal constraint, boards should realize that deferring preventative projects now may result in more costly remedies in the future.

## Operations and Maintenance

Facility operations and maintenance (O&M) can be tailored to save energy and reduce chemical exposure. Sometimes this also results in cost savings.

**1. Install programmable thermostats.** Program temperature controls to shut down heating and cooling during periods when spaces are unoccupied.

**2. Perform energy surveys and audits.** Perform walk-throughs and more intensive audits to quickly identify O&M problems and solutions.

**3. Review maintenance and cleaning activities.** Regular reviews extend equipment life and avoid costly breakdowns. Use paint with low volatile organic compounds (VOCs) to reduce exposure to carcinogenic products. Switch to "green" cleaning products.

**4. Provide training for key staff.** Remind knowledgeable personnel that energy efficiency from O&M requires behavior change and vigilance.

**5. Establish a plug-load plan.** Check settings on computers and vending machines to shut down after inactivity.

**6. Control exhaust fans.** Shut down exhaust fans when building ventilation is turned off to avoid unwanted outside air.

**7. Inspect outside air systems.** Clean roof units and economizers to ensure optimum operation.

**8. Install outdoor lighting controls.** Use timers and photosensors on outdoor lights to decrease wasted lighting.

**9. Replace older exit-sign lights with light-emitting diodes.** LEDs require much less maintenance and have longer lives than conventional lights, so they are great fits for exit signs.

## Case Study: Need an Extra \$400K?

Andover Public Schools in Andover, Mass., monitors energy usage through efficient and effective preventive maintenance using the following overlapping operations-and-maintenance and indoor-environmental-quality measures. The staff

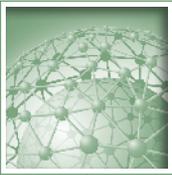
- Change filters and belts
- Clean coils
- Clean boilers
- Maintain steam traps
- Inspect/Verify control settings
- Improve vehicle/heavy equipment maintenance procedures
- Consolidate night programs within schools (closing at 6 p.m., from November to April)
- Shut off unneeded equipment/lights
- Shut off exterior lighting at 11 p.m.

These measures resulted in a reduction in electric usage per square foot for every school in the district ranging between 6.54 percent and 22.66 percent between 2005 and 2008. As a result, the district received utility company rebates totaling \$457,000.

## SOURCES:

Hatcher, Katy. "Easy Access to Energy Improvement Funds in the Public Sector." U.S. Environmental Protection Agency, ENERGY STAR. November 2004.

Piantedosi, Joe. "Facility Masters Seminar Series: Energy Cost-Cutting Strategies in K-12 Operations and Maintenance." Webinar. July 16, 2009.



# Creating Networking Opportunities on Indoor Environmental Quality (Vol. 1, No. 6)

NETWORKING ALLOWS DISTRICTS to share experiences and successes, avoid pitfalls, overcome barriers, and motivate one another about indoor-environmental-quality initiatives. In addition, districts should take advantage of the U.S. Environmental Protection Agency's and the American Association of School Administrators' resources and networking opportunities to improve IEQ.

## U.S. Environmental Protection Agency

Establish relationships with regional EPA offices and sign up for EPA Indoor Air Quality (IAQ) Tools for Schools (TfS) Connector. The IAQ Connector listserv enables districts to link to peers, share information, and communicate progress through a web-interface. Join the listserv by sending a blank e-mail message to [schools\\_iaq\\_connector-subscribe@lists.epa.gov](mailto:schools_iaq_connector-subscribe@lists.epa.gov) and check your e-mail inbox for confirmation and details.

### Attend EPA's Indoor Air Quality (IAQ) Tools for Schools (TfS) Symposium

School board officials, administrators, school nurses, teachers, facility managers, school and health association members, parents and others from the United States and abroad attend the National EPA IAQ Tools for Schools Symposium. At the EPA Symposium, experts discuss current issues including new school construction, asthma, mold remediation, student performance, communications, financing and networking. The symposium also provides a platform for EPA to recognize the success of its Tools for Schools Program and presents awards to schools with exemplary indoor air quality programs.

### Apply for EPA IAQ Tools for Schools Awards

**IAQ TfS Great Start Award:** The district has made an initial commitment to the *IAQ Tools for Schools* Program and Kit.

**IAQ TfS Leadership Award:** The district has shown significant progress in implementing an IAQ management program.

**IAQ TfS Excellence Award:** The district has an exemplary IAQ program and has shown exceptional commitment to good IAQ management in schools and in their communications and outreach efforts.

Award applications and further information can be downloaded at [www.epa.gov/iaq/schools/awards.html](http://www.epa.gov/iaq/schools/awards.html).

## American Association of School Administrators

The American Association of School Administrators invites you to join its Urban and Rural Healthy Schools Coalition, which allows district leaders to receive free technical assistance, professional development, networking, mentorship opportunities, and indoor envi-

ronmental quality resources to sustain a healthy learning environment.

Coalition members meet face-to-face and online to exchange success stories, lessons-learned and best-management practices. The group is comprised of superintendents and their district administrators, facilities managers/directors and school health staff.

AASA's coalition members have learned that urban and rural districts have intersecting indoor environmental quality issues, and are more similar than their geography might dictate, especially around issues of leadership support, funding, community involvement and program sustainability. The coalition members take away concrete strategies on how to engage school leaders and other stakeholders to improve the health of students. As district IEQ programs develop and evolve, AASA showcases success through publications, AASA and EPA conferences, symposiums, webinars and other events.

To join AASA's Urban or Rural Healthy Schools Coalition, please send an e-mail requesting an application to [children@aasa.org](mailto:children@aasa.org).

## Internal and External Networking

The district should establish a public input protocol for receiving and addressing IEQ concerns during board meetings. Board members must be knowledgeable about the health implications of poor IEQ and the major provisions of the district's plan to maintain good air quality. They must be able to assure the community that the district recognizes the importance of good IEQ and is taking appropriate steps to ensure that schools provide a healthy environment for students, staff and the community.

Districts are encouraged to involve regional EPA, AASA, city and county agencies, and other local resources in the development of the district's policies, administrative regulations and/or IEQ strategic plan.

Use district interconnections and health, maintenance, facilities committees to support and foster internal and external relationships between the superintendent, health staff, facilities staff, and building-level staff to improve indoor environmental quality. IEQ management is most effective with internal seamless communication that includes staff education and awareness. Use opportunities during staff meetings to network between the different departments and collaborate on IEQ initiatives.

### SOURCE:

California School Boards Association. "Indoor Air Quality: Governing Board Actions for Creating Healthy School Environments." Governance and Policy Services, Policy Briefs. July 2008.



# Resources

## Leadership:

AASA Leadership Development. [www.aasa.org/LeadershipDevelopment.aspx](http://www.aasa.org/LeadershipDevelopment.aspx).

Auburn, Ala., City Schools Leadership Capacity Building Program — Member Research. [www.auburnschools.org/LCBP/Research/Research.html](http://www.auburnschools.org/LCBP/Research/Research.html).

The Environmental Law Institute. “School District Liability for Indoor Air Quality Concerns.” August 2005. [www.elistore.org/reports\\_detail.asp?ID=11094](http://www.elistore.org/reports_detail.asp?ID=11094).

## Overcrowding:

California Air Resources Board and Department of Health Services. California Portable Classrooms Study. A study of the environmental health conditions in portable classrooms. [www.arb.ca.gov/research/indoor/pcs/pcs.htm](http://www.arb.ca.gov/research/indoor/pcs/pcs.htm).

The Collaborative for High Performance Schools. Best Practices Manual on Relocatable Classrooms. [www.chps.net](http://www.chps.net).

SmartSpace Modularity. [www.triumphsmartspace.com](http://www.triumphsmartspace.com).

## Prioritizing and Awareness:

AASA’s Children’s Program Resources. [www.aasa.org/ChildrensPrograms.aspx](http://www.aasa.org/ChildrensPrograms.aspx).

EPA. “IAQ Tools For Schools The Framework for Effective School IAQ Management: Six Key Drivers of Success.” [www.epa.gov/iaq/schools/pdfs/excellence/change\\_package.pdf](http://www.epa.gov/iaq/schools/pdfs/excellence/change_package.pdf).

EPA. “IAQ Tools For Schools Curricula.” [www.epa.gov/iaq/schools/curricula.html](http://www.epa.gov/iaq/schools/curricula.html).

Healthy Schools Campaign. “Healthy Schools Campaign Through Your Lens.” Student photography contest on school environmental health. [www.healthyschoolscampaign.org/getinvolved/action/yourlens/](http://www.healthyschoolscampaign.org/getinvolved/action/yourlens/).

National Radon Poster Contest. <http://sosradon.org/2010-poster-contest>.

United Federation of Teachers. Environmental Health Publications. [www.uft.org/member/publications/health/](http://www.uft.org/member/publications/health/).

United Federation of Teachers. Building Environmental Health Articles. [www.uft.org/member/workplace/environmental/building/](http://www.uft.org/member/workplace/environmental/building/).

## Communications:

AASA. IAQ Resource Collection. [www.aasa.org/iaq-resources.aspx](http://www.aasa.org/iaq-resources.aspx).

AASA. “Why School Communication Matters: Strategies From PR Professionals.” [www.aasa.org/schooladministratorarticle.aspx?id=2300](http://www.aasa.org/schooladministratorarticle.aspx?id=2300).

EPA. Healthy School Environments Assessment Tool (HealthySEAT). [www.epa.gov/schools/healthyseat/](http://www.epa.gov/schools/healthyseat/).

EPA. National Indoor Air Quality Tools for Schools Awards Program. [www.epa.gov/iaq/schools/awards.html](http://www.epa.gov/iaq/schools/awards.html).

National School Public Relations Association. *Communication Matters*. [www.nspr.org/superintendents](http://www.nspr.org/superintendents).

Washington State Department of Health Division of Environmental Health. “Responding to Indoor Air Quality Concerns in our Schools.” [www.doh.wa.gov/ehp/TS/School/respond-iaq-schools.pdf](http://www.doh.wa.gov/ehp/TS/School/respond-iaq-schools.pdf).

## Funding:

EPA. Energy Star Program. [www.energystar.gov/index.cfm?c=k12\\_schools.bus\\_schoolsk12](http://www.energystar.gov/index.cfm?c=k12_schools.bus_schoolsk12).

EPA. Energy Smart Schools. [www1.eere.energy.gov/buildings/energysmartschools/](http://www1.eere.energy.gov/buildings/energysmartschools/).

School Dude. Webinars on school Indoor Environmental Quality and maintenance. [www.schooldude.com/resources/maintenancel](http://www.schooldude.com/resources/maintenancel).

U.S. Green Building Council. “Green Existing Schools Project Management Guide.” [www.usgbc.org/DisplayPage.aspx?CMSPageID=2114](http://www.usgbc.org/DisplayPage.aspx?CMSPageID=2114).

## Networking:

AASA. Membership and conference information available at [www.aasa.org/Join.aspx](http://www.aasa.org/Join.aspx).

AASA’s Urban and Rural Healthy Schools Coalition, e-mail [children@aasa.org](mailto:children@aasa.org) with the subject line “Urban and Rural Healthy Schools Coalition.”

EPA. IAQ Tools For Schools Symposium. [www.iaqsymposium.com](http://www.iaqsymposium.com).

EPA. IAQ Tools For Schools Connector Listserv. Send a blank e-mail message to [schools\\_iaq\\_connector-subscribe@lists.epa.gov](mailto:schools_iaq_connector-subscribe@lists.epa.gov), then check your e-mail inbox for your confirmation and membership details.



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