11 QUESTIONS TO ASK ABOUT THE AIR QUALITY IN YOUR CLASSROOM

After you read through these classroom air-quality issues, you will probably have some more

QUESTIONS.

If you're a parent or a teacher,
you're going to demand some

ANSWERS.

Every school day all across America, millions of students and teachers breathe dirty air that lowers their performance and even makes them sick. According to the National Education Association, indoor air pollutants can reach levels from five to 1,000 times higher than those outdoors. And yet, we send our children to this kind of environment for seven or eight hours a day, five days a week, 40 weeks a year. Year after year after year.

How does this affect the health of our children and our teachers? What impact does it have on performance and learning? The answers to these and other questions may seem overwhelming at first. But, don't get discouraged. At least one answer to the problem is surprisingly simple.

1. HOW EFFECTIVELY ARE YOUR TEACHERS TEACHING AND YOUR STUDENTS LEARNING?

Regardless of the methodology and criteria used for measuring your school's performance, one thing is indisputable: Children, teachers and administrators perform better when they are not sick and/or absent from school. But when they are sick or just not feeling well, the response is all too often just a quick, superficial Band-aid® solution. Over-the-counter medications, and even pharmaceutical prescriptions, have no effect on the root of so many illnesses. The link to indoor air quality is rarely even considered.

2. WHAT IS YOUR SCHOOL'S ABSENTEE RATE?

The U.S. Environmental Protection Agency reports that respiratory problems such as asthma and infections are the illnesses most closely associated with absenteeism. Asthma diagnoses are rising steadily among school-aged children, including a 45 percent leap between 1980 and 1996. It's the No. 1 cause for kids to miss school. As for teacher absences, the EPA also reports that poor air quality increases the likelihood that adults will take sick leave even for minor ailments. Additionally, it extends the number of days they stay away. The American Medical Association says teachers take 5.3 sick days during the school year.

3. WON'T MEDICINE TAKE CARE OF THESE PROBLEMS?

Unfortunately, many of the medications that fight respiratory illnesses and their symptoms tend to create a new set of symptoms that are not always favorable toward learning. Children on allergy medicine, for example, frequently experience drowsiness. The medication is often costly and can become a major ongoing burden on parents' budgets month after month, while the most serious contributor to the problem – poor classroom air quality – goes unnoticed and untreated.

4. EVERYONE CATCHES A COLD ONCE IN AWHILE. HOW BAD CAN THAT BE?

A teacher has an upper respiratory infection and takes a day off. The cost? The district has to pay a substitute to come in, and the students will probably end up about one day behind. Consider, however, the expense incurred if the teacher gets sick so often that he or she decides that a change is necessary. Teachers who feel they need to remove themselves completely from an unhealthy environment do so at a great cost to the school system. When State University of New York asked teachers about their working conditions, more than 50 percent said they were considering leaving their current schools because of poorly maintained facilities. Another 35 percent said they were considering leaving the profession altogether. Teacher turnover increases recruitment time and expense for school districts. It also hampers student success while new teachers "ramp up."

5. IS YOUR SCHOOL'S ENVIRONMENT CONDUCIVE TO LEARNING?

Students and teachers don't have to miss class to miss opportunities to teach and learn. EPA studies show that indoor pollution or inadequate ventilation has a negative effect on student and teacher performance. Even those people who do not have a diagnosable illness can simply not feel well due to poor air quality. They can feel lethargic. They may have headaches, mild sore throats or itchy eyes. Or, they may sense that the air is "stale," "stuffy" or "too dry." Evidence suggests that this kind of continued environmental stress can drain one's physical and mental resources and send a person's performance into a downward spiral. When large numbers of students and staff experience ongoing discomfort related to the air inside their schools, teaching and learning performance deteriorate.

6. HOW DO YOUR SCHOOL'S TEST SCORES RANK?

When teachers and students are present and attentive in the classroom, learning has a far greater opportunity to occur. Conversely, when the air quality is low, so is the ability to learn and perform well on tests. These cause-and-effect relationships manifest themselves in a variety of ways, including test scores. One UCLA study showed that poor classroom air quality lowered test scores by 17 percent.

7. ARE NEWER SCHOOLS EXEMPT FROM THESE PROBLEMS?

No such luck. Fact is, the opposite may be true. Newer schools are typically so airtight that very little circulation occurs. Students breathe the same stale and frequently contaminated air all day long. Older schools, although not as airtight, are often plagued with large amounts of dust and mold. But regardless of the age or condition of your school, the number of airborne particles in a classroom is not driven as much by the room itself, but by the people who use it.

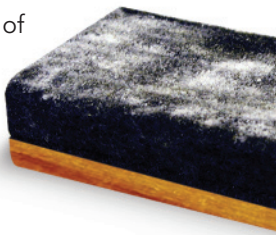
8. HOW DO THE CONTAMINANTS GET INTO THE CLASSROOM IN THE FIRST PLACE?

Students, teachers and other staff members are traveling "hosts" for every contaminant they encounter at home, in the mall, outdoors, on the bus, etc. They bring it in on coats, clothing, skin and hair. Much of whatever is carried in by one student eventually finds its way into the lungs of every other student. The classroom is like a giant Petri dish in which airborne pathogens, viruses, pollen, mold, bacteria and more are introduced, shared and even nurtured.

9. WHAT OTHER SOURCES CONTRIBUTE TO THE PROBLEM?

Nature itself contributes mold, pollen, insects, dust, wind and many other common sources of allergens and irritants. Additional culprits include chemicals from paint, furniture, carpets, glues and cleaning products as well as infrastructure-generated contaminants such as construction and renovation dust. These elements can create immediate medical risks as well as permanent lung damage.

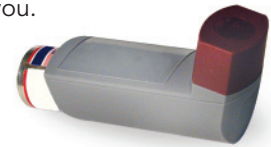
10. IS THIS ANOTHER PROBLEM WITH EXORBITANTLY EXPENSIVE SOLUTIONS?



No. Surprisingly, one solution is not the least bit expensive. This is one of those rare instances in which a major problem can be solved quickly, easily and economically. As amazing as it sounds, most classroom air pollution – and the problems that come with it – can be reduced for as little as a few hundred dollars per room. In many cases, this nominal cost can be made even lower with heating and cooling efficiencies gained in the process.

11. IF THE INDOOR AIR QUALITY IS SO BAD, WHY HAVEN'T WE HEARD MORE ABOUT IT?

When poor conditions exist over a long period of time, those conditions become the norm. Children and teachers still get sick. Performance continues to suffer. Learning declines. If only a few of us complain, perhaps it's because feeling lousy has become the status quo. Maybe that's why so few parents and teachers are raising this important issue and making it known to other parents and educators. Maybe it's time for parents, teachers and administrators to work together to find solutions to this problem. Maybe this issue and the children and teachers who are victimized by it are simply in need of some informed and vocal champions. Maybe what they need is you.



For more information, and to see how some schools are successfully combating poor indoor air quality, we invite you to log on to Purifan.com. Click through the school desk icon to "Research Links." Whether you're just discovering the indoor air quality problem or you're ready to become fully involved and activated, you'll find useful information, materials and links to related sites, including the EPA's "Tools for Schools."

You'll also find information on what some educators believe to be a powerful solution to many of the problems touched on in this booklet. It's called Purifan. Just one affordable Purifan clean air system will filter all the air in an average classroom every 90 seconds. These simple, low-cost ceiling fan air purifiers can reduce up to 90 percent of airborne particles from classroom air. With periodic filter replacement, they do it quietly, affordably and effectively.

If you're a parent or an educator – whether you look into the Purifan solution or not – please look into the indoor air quality of the schools that affect your life. It's a common and costly problem in almost every classroom. We believe it can be solved simply and economically. But no matter what you believe, it won't solve itself.

Please start taking your own kind of action today.
For more information, call 877.789.9580.

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