11

ANSWERS REGARDING THE STATE OF OUR CLASSROOM AIR QUALITY

Every school day across America, millions of students and teachers breathe dirty air that lowers their performance and even makes them sick. And that's a serious

PROBLEM.

Now there's a simple, effective, affordable

SOLUTION.

Fifty years ago, the education question emphatically posed by the American public was "Why can't Johnny read?" Today, the issue has degenerated into something far more basic. It's become "Why can't Johnny even breathe?" Classroom air quality is threatening the health, well-being and education of a huge number of American students and their teachers.

Investigations by the U.S. Environmental Protection Agency show that the air in U.S. classrooms contains astronomical levels of allergens, mold and germs. These are major contributors to respiratory problems such as allergies, asthma and infections, which 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. When it comes to kids missing school, asthma is the undisputed heavyweight champ. Literally. Because asthma can substantially reduce a child's activity level, it heightens the risk of obesity, diabetes and other conditions that usually evolve into lifelong struggles. Here's one more sobering fact: According to the Center for Disease Control, in a little over a decade, asthma-related deaths among children have risen 78 percent, despite an improvement in outside air quality.

Contaminated air affects teachers, too. And students and educators alike don't have to be absent to be ineffective. Airborne contaminant levels are directly related to headaches, inattention, drowsiness and just plain not feeling well. A UCLA study showed that bad classroom air induced a 17 percent drop in test scores.

But wait. Before we get ourselves depressed over this growing problem, let's take a look at what some educators are calling the most effective and affordable solution they've ever seen.

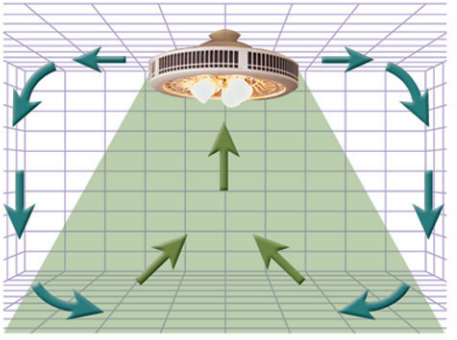
It's called Purifan.

1. WHAT IS A PURIFAN?

The Purifan clean air system is like a highly advanced ceiling fan with air filters. The technology is really pretty basic. And it has already proven its effectiveness in a wide range of environments that are far more polluted than school classrooms.

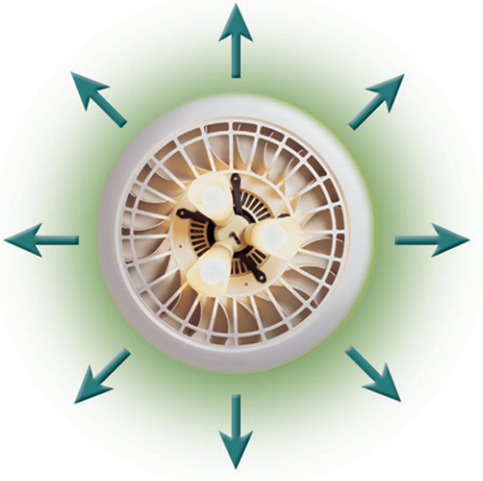
2. HOW DOES IT WORK?

Like a ceiling fan, Purifan circulates the air. But unlike a ceiling fan, it cleans the air before it redistributes it. To get any benefit from an air purifier, the system must provide a certain number of air changes per hour. The Center for Disease Control recommends 12 air changes every hour. For classroom air filtering, Purifan's air change rate goes far beyond the recommended minimum. At 40 times per hour, it is unsurpassed.



3. HOW EFFICIENT IS IT?

Based on an 800-square-foot classroom, one Purifan will circulate and clean all the air every 90 seconds. Room-to-room comparisons indicated that Purifan-equipped classrooms were 90 percent lower in airborne particles than rooms not equipped with Purifan clean air systems.



4. IS THIS KIND OF PERFORMANCE EXPENSIVE?

Not at all. Purifans are extremely affordable. There's very little initial cost – just a few hundred dollars per classroom. Purifans are easy to install in virtually any room, old or new. Like putting up a ceiling fan, it's a quick and simple job.

5. WHAT ABOUT MAINTENANCE?

That's quick and easy, too. We recommend replacing the filters two or three times during the school year. Filters are inexpensive and can be purchased along with the units or separately. The switch-out procedure takes just minutes, and doesn't require any tools.

6. BUT AREN'T THEY EXPENSIVE TO OPERATE?

Fact is, Purifans can actually help you save on energy bills. They produce a slight wind-chill effect in warm months. And in winter, they bring heated air down from the ceiling to help warm the rest of the classroom. Thermostats can be set at energy-saving levels in both warm and cold weather. This alone can generate substantial savings in fuel bills, offsetting installation and operating costs.

7. SOUNDS LIKE IT MIGHT BE NOISY. IS IT?

A Purifan makes so little sound, it's virtually silent. Purifans move 10 to 200 times as much air as comparably priced floor-model air cleaners, which are what teachers and schools frequently turn to as solutions to poor air quality. Those air cleaners are often noisy, and can wear on the teacher's voice and his or her ability to verbally engage students for hours every day. Because Purifans do not have normal ceiling fan blades, they don't produce the typical "blade noise" caused by everyday ceiling fans and other filtering systems that require high-speed rotors. They don't churn the air as much as regular fans, either. Teachers with Purifans appreciate air movement that is noticeable, but isn't so powerful that it blows paper off desks.

8. WHAT ABOUT OZONE SYSTEMS?

There are hundreds of air cleaners available that make all types of claims. Ozone is known to be harmful in high concentrations, and there is always a risk of concentration levels getting too high. The technology works by attaching ozone to airborne particles, making them too heavy to float in the air. But the particles remain on room surfaces, and can easily be stirred up and sent back into the air. Additionally, the EPA does not recommend using air cleaners that add Ozone or Ions to the classroom.

9. HOW ABOUT IONIC-CHARGING TECHNOLOGY?

Ionic cleaners move only about 10 to 20 cubic feet of air per minute. They simply cannot cover the square footage of a classroom. Nor can they keep up with the continuous onslaught of new particles. What's more, ionic-charged air that is not collected by the unit's collection plates will attach to walls and carpet, and in the process, deposit black scum on those surfaces. Those collection plates require weekly cleaning. Consumer magazines report that these units are not effective outside of a 3 x 4-foot area. It would take 66 ionic cleaners to do the job of one Purifan.

10. ARE THERE OTHER FAN-TYPE SYSTEMS ON THE MARKET?

There are some small fan-driven systems. They don't move and filter nearly as much air as Purifans do, and they're far more expensive. A small fan-driven system that does not ionically move particles may move up to 400 cubic feet per minute and still cost $800 to $1,200. At best, that's only about 20 percent of Purifan's whopping 2,000-CFM performance.

11. WHAT ARE THE NEXT STEPS?

Consider installing a Purifan to see the actual impact it will have on your students and teachers. We want to work with you. We're extremely flexible, and can arrange custom agreements including for-lease or purchase programs with or without full service and maintenance. For a lease of less than $30 per month, Purifan will install the unit and provide filter-change services. That is much less than the monthly expenditure for medication, office visits and treatment for even one of the many children suffering from allergies or asthma in a single classroom.

We also invite you to log on to Purifan.com. Click through the school desk icon to "Research Links." You'll find useful information, materials and links to related sites, including the EPA's "Tools for Schools."

Just give us a call, and let's talk about your options. You'll find that our approach is simply to find ways to work together. Call our toll-free number at **877.789.9580**, and let's get started.

877.789.9580

SC-AB1-9/05