

# Keeping Eyes On the Ball(s)

*Creating healthy indoor school environments.*

**By David A. Stubbs 02/01/14**

During the summer I studied abroad, I befriended a street performer who was able to juggle nine balls for a sustained period of time, while balancing on a rope, held by audience members on each end. Considering that I could only juggle three balls, I was simply mesmerized.

Fast forward three decades, to my current task of designing school facilities as the director of Facilities Planning and Construction, Clarke County School District, Ga. We can all agree that we are continually presented with additional challenges from concepts such as green, sustainable and healthy. Nearly 20 years ago, in 1995, the EPA first introduced Indoor Air Quality Tools for Schools, a voluntary program that provided tools and guidance to assist schools in the prevention and identification of indoor air pollutants in our schools. It was a well-designed, practical framework for effective school indoor air quality management designed to assist school-based personnel in the prevention and resolution of IAQ problems. This was a perfect solution — feet on the ground, three balls in the air!

The first few certification systems provided guidance on creating buildings and high-performance schools that maximized the energy and resource savings potential by supporting green, healthy and comfort concepts that enable opportunities for a quality education. Another great set of solutions — six balls in the air, we can keep up!

While these ideas are occurring and being demonstrated throughout the country, designers are still fending off funding cuts, material cost increases, the demands of technology and increased safety awareness. This eventually forces us to continue to do more with less. Nine balls — I have seen this somewhere!

With the re-introduction of educational ideas and concepts such as collaboration, project-based, active and flipped, into the design mix of 21st-century conversations, someone added a rope!

At our district, we knew we could not keep the antiquated set of tools that we were using and create new facilities that demanded juggling nine balls, on a rope, over a sustained period of time. We decided to stop what we were doing, leave all of our preconceived ideas behind us, and start from a clean slate. We systematically brought one idea, component or system in at a time and evaluated it against our defining principles and our architectural instrument.

Our ultimate goal is to create safe, high-performing, healthy school facilities that respond to the broadest and most current educational ideals. These facilities must also support simplistic and cost-effective cleaning and maintenance solutions, reduce the impact or burden on the general fund of the school district and ultimately improve student achievement.

We created a set of eight defining principles that are not specific to any tool or component within the environment, but were intended to be our guide for all decisions in the design of our new facilities.

Those eight principles are:

1. Change the Environment
2. Reduce the Clutter
3. Integrate Untethered and Transparent Technology
4. Respond to Multiple Learning and Teaching Styles
5. Develop Mobility
6. Create Adaptable, Flexible and Recoverable Tools

7. Design Multi-Functional Tools
8. Create Fun, Inviting and Engaging Environments.

We met with stakeholders and designers and analyzed everything from carpet and technology to media centers and storage solutions. We put each selected item or idea through a stringent set of tests that we created, and if the available products in the market place did not fit our intended direction, we demanded different solutions that we designed ourselves — if needed.

We created a 38-point instrument that we delivered to our architects, designers and engineers that gave notice that we were going to be venturing into a new energy in design not unlike the work that was performed some 70 years ago in great examples of astute school design.

The concepts that were first introduced in 1995 by the EPA were actually the hidden, underlying foundations for success. It's not that we ignored them in the process; it was more like we only became aware of them as the facilities were being handed off to the end users. As an example, because we focused heavily on reducing the clutter by engaging systematic storage solutions, the classrooms emerged with less permanently fixed components and enabled the opportunity for quick efficient cleaning strategies. This enhances student and teacher performance, reduces absenteeism and protects children's health and the environment.

We also became aware of our choices enabling sustainable concepts by not designing "your" desk or "your" classroom. In contrast we designed "a" desk and "a" learning environment.

As with all good design, this is a continuous process of listening, observing and learning (LOL) what is next, enabling us to provide safe, healthy, high-performing learning environments for our children.

We still have nine balls in the air but managed to lose the rope!

This article originally appeared in the issue of <https://spaces4learning.com/articles/2014/02/01/healthy-indoor-school-environments.aspx>

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