

TOP K-12

FACILITY MANAGEMENT TRENDS

According to the National Center for Education Statistics, there were 132,853 K-12 schools in the U.S. as of the 2015-16 school year. In the Fall of 2019, those schools had 56.6 million students in attendance.

Student's needs are changing, and education trends continue to evolve at a rapid pace. It is now more important than ever to be aware of these changing trends and benchmark where your District is today and where it needs to be tomorrow. Performing an evaluation of your school's design, layout, and technology capabilities will allow you to gain a better understanding of the possibilities available as you plan for the future needs of your District.

Below are the top facility management trends that support the comfort, safety, and efficiency of a K-12 School.

BY SITELOGIQ

SAFETY & SECURITY

1. Add Security Vestibules

Schools have begun to include a security vestibule positioned outside the school building's front door. The vestibule and other entrances to the school are locked as the school day begins. A school staff member stays inside the central vestibule, controlling who gains entry to the school throughout the day.

2. Enhance Outdoor Design

The facility design of play areas, as well as walkways, ramps, parking lots, and carpool zones is essential to student and staff safety and accessibility. School parking lots are packed with traffic, particularly during the drop off and pick up hours. These high-volume areas can result in unsafe conditions, leading to potential injuries or property damage. Transportation or traffic plans for your facilities can help to reduce congestion and create a much safer environment. Areas to address include parking lot design and traffic flow; busing zones, signage and pavement markings, parent drop-off and pick-up locations.

3. Increase Sight Lines

Opening the design of a school building allows teachers and staff to monitor and supervise the students more easily because fewer corridors and corners are blocking their sight-lines. Students are less likely to bully or commit a crime if they are in sight. Open designs are achieved by developing an overall creative and simple building layout incorporating wider corridors and staircases, reducing the number of entrances, and increasing the amount of light to inside areas of the building.

CLASSROOM SETTING

1. Incorporate Flexible Learning Spaces

Schools should have a student-centered design that can accommodate the way they learn best. Designs can support critical thinking skills, problem-solving, and active learning through things like outdoor classrooms and flexible learning spaces. One study found that 73 percent of all student progress could be traced back to a classroom design that was linked to flexibility and student ownership. Flexible learning

spaces should include things like varied seating options for students, movable partitions, and various learning areas such as:

- Learning Studios — specifically for lectures or group instruction and look like a classroom but with more flexible furniture options
 - Learning Hubs — areas near the studios that have interactive learning stations used for team teaching
 - Group Rooms — semi-private areas for small groups or team activities
 - One-to-One Rooms — small, private rooms used for private instruction, testing or very small group activities
- K-12 facility designs should also offer a variety of environments for the students; for example, a small nook where they can go to relax in a quiet area or a big project lab where they can work with other students. Creating connections—both physical and visual—between spaces can encourage a creative, collaborative environment where students can work toward their goals.

2. Provide Digital Environments for Lessons

Technology allows students to move outside of their traditional, formal learning areas into different, more laid-back environments throughout the building. This shift could include adaptable furniture or incorporating more smart technology into the classroom.

Blended learning or “tradigital” learning encompasses a mix of both traditional classroom elements and the new digital learning environment. Instead of remaining in one place for the majority of the day, “tradigital” learning encourages teachers to incorporate stations that students can rotate around in the classroom.

Options may include two to five or more main learning stations, focused on areas such as communication, working independently, technology, collaboration, and creativity.

The stations lead to a more personalized learning environment because teachers can focus on specific needs in small groups.

3. Use Technology to Interact with Other Classrooms

Technology can also make it easier for students and teachers to interact with others. Using video conferencing technologies, students and teachers can connect with other classes within a school, across the country, and even across the planet for shared learning opportunities or to enhance curriculum and development.

For some schools with classroom monitors and iPads, students may connect their iPads to monitors to collaborate with other classes or even host guest instructors and communicate with them. An increasing number of teachers are also taking to social media to work with other teachers and share

ideas on how to keep things new and exciting in their classroom. As technology continues to accelerate, new methods of communication across different classes, and even schools will emerge to make classroom learning an even more interactive experience for students and teachers alike.

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4. Reduce Class Sizes

Moving away from the traditional classroom of 20-some students makes for a more intimate learning experience for students while reducing the challenges of managing large class sizes. Having smaller classes allows teachers to give students a more personalized learning experience, likely improving their academic achievement. The Student/Teacher Achievement Ratio (STAR) study, one of the most influential studies on this topic, makes an excellent case for class size reduction.

The STAR study included 79 elementary schools and assigned students to kindergarten classes at random. Some were in classes of 22-26 students, while others were in smaller classes of 13-17 students. These kids stayed in the same size classes through third grade and were tested in reading and mathematics. Students in the smaller classes had higher test scores compared to students in the larger classes, especially for low-income and minority students. The benefits of small class sizes were reported to extend into the upper elementary grades, and students in small classes were even found to exhibit better behavior in the classroom. Follow-up studies years later found that the students in small classes had better academic and personal outcomes for the rest of their schooling and beyond.

Schools have recognized the benefit of class reduction, and, today, 25 states have class size restrictions for at least some grades. Seven other states have established class size goals or incentives. Additionally, 77 percent of Americans report they would rather spend education money on reducing class sizes than paying teachers more.

FACILITY ENVIRONMENT & VIABILITY

1. Install LED Lights

Switching to LED lights at your K-12 school is now very cost-effective and has many benefits, such as improved energy efficiency, flexibility and durability, and overall better light quality. Schools often see improvements in academic performance after upgrading to LED lights because they can imitate natural light, which has been shown to enhance alertness, mood, energy, and performance. In addition to an improved student learning environment, you can save significant energy and operational costs switching to LED lights. Compared to incandescent lighting, LEDs last 25 times longer and saves at least 75 percent of your lighting energy. Plus, LED light bulbs are more environmentally-friendly than other types of bulbs, as they are mercury-free and completely recyclable.

“ **Upgrading your systems can provide multiple benefits for you and your students...** ”

2. Upgrade or Replace HVAC/Temperature Controls

According to the Environmental Protection Agency (EPA), 450 K-12 school districts spend more on energy due to aging infrastructure than is spent on textbooks and computers combined. The average school building is over 45 years of age, according to the National Center for Education Statistics (NCES). That is well past their calculated useful life, even when renovations are included.

As school budgets are challenged and costs continue to rise, fewer resources are available for energy, operations and maintenance. The failing HVAC/Control systems then have a negative impact on the student learning environment.

Upgrading your systems can provide multiple benefits for you and your students, including not just economic, but improved temperature control, better indoor air quality and even sound attenuation. These improvements have shown to reduce absenteeism, increase student concentration and productivity, and positively impact student test scores.

3. Improve Sound & Air Quality

Classroom environments must support clear communication. With up to 60% of daily classroom activities involving speech between teachers and students, or between peers, extreme or inappropriate levels of background noise can pose issues for reading and spelling ability, behavior, concentration, attention and overall academic performance. ANSI-ASA (Acoustical Society of America) design standards call for background noise levels to be below 35 dB(A).

4. Become LEED Certified

To take your school's sustainability to the next level, LEED certification could be a consideration for your facility. LEED (Leadership in Energy and Environmental Design), was formed to enhance buildings' overall energy efficiency and environmental performance. To become LEED-certified, you must meet a series of prerequisites and then earn points to get to different levels of certification. ✿



If you want to work toward more sustainable facility management but need some guidance, look into performance contracting for K-12 schools. With more than 700 team members, including professional engineers, project managers, certified energy professionals, architects, and building automation experts to support your project, SiteLogIQ partners with public and private schools throughout the U.S. to bring comfort, performance, and efficiency to the classroom through customized school construction and modernization. SiteLogIQ can provide knowledgeable master facility planning and contracting and financing options for your District based on the laws and regulations of your state to help you find the best ways to make energy-efficient improvements to your facilities to meet 21st-century educational goals.

To learn more contact:

Mike Taylor

VP Sales & Marketing

Mike.taylor@sitelogiq.com

(888) 819-0041