Top 5 Design Trends for Educational Facilities

Students spend an average of eight hours a day, 180 days a year, in school. Multiply that by 13 years for Kindergarten through high school, and 17 years for those who attend colleges or universities, and a great deal of time is spent in the halls and on the campuses of educational facilities. With so much of their time spent in classrooms, the impact of school design on students is significant. According to the Whole Building Design Guide, the lights, colors, size of facilities and layout of rooms can have positive or negative stimulation on students¹. Here are the top five design trends for educational facilities.



Technology: Learning does not have to be confined to the classrooms, and technology opens students to an entire world of education. On college campuses especially, mobile devices have greatly impacted the way information is accessed and disseminated. With learning extending beyond the classrooms, design to accommodate technology must follow. No longer will students access technology only in computer labs. Daniel M. Tarczynski, AIA, of SchenkelSchultz Architecture reports that "every space, even those beyond the traditional classroom, has become a 'learning' space.²" Distance learning is another way students can take advantage of technology necessary to meet the needs of these students. Those designing and building educational facilities must make the buildings and campuses well-equipped for emerging technologies to continue to influence students today and into the future.



Flexible Collaborative Learning: Designers consider the effect room layout and furniture placement may have on students' abilities to learn. Room shape and furniture that can be arranged in multiple ways can affect the way students communicate with one another and how the teachers effectively educate within their classrooms. Kimberly Coffeen, a Senior Educational Facility Planner at LPA, Inc. writes that "planning for diverse types of spaces of different sizes, purposes and qualities can enhance the classroom settings.³" Designs for flexible, open spaces that promote collaboration may include sliding walls, furniture that can be rearranged easily, and lighting in different areas of the room.



Sustainability: Education facilities can have a large impact on the amount of energy consumed in the community, and even small changes can lead to major savings. Implementing green efforts into design can improve students' health and enhance their learning. Coffeen writes that "a well-designed classroom that includes proper ventilation, good acoustics, quality indoor air quality (IAQ) and abundant daylight has a positive impact on students' attendance, concentration and performance.³" Energy efficiency measures include changing out interior and exterior lighting, updating mechanical and electrical systems to more efficient models, installing solar panels and even planting green rooftops to help with cooling and storm water runoff.



Security: Unfortunate and tragic events can occur anywhere. Educational facilities from elementary schools to college campuses are taking measures to improve security, with designs that feature secure entryways, reinforced doors, surveillance cameras, emergency communication systems and even dedicated routes to flow student traffic in the event of an emergency. Colleges and universities have incorporated highly visual security tactics into their campuses in an effort to thwart criminal activity and provide accessible safe havens to students in need. These methods include blue light emergency phones, emergency kiosks, well-lit outdoor areas and maintaining bushes and trees so they're not overgrown⁴.



Community Involvement: More and more, the community is becoming involved in the planning and design of educational facilities. Often, these facilities can serve multiple uses, and with the community's input, can reflect the values of the neighborhood addition to functioning well for all who use it. The Whole Building Design Guide notes that "a school building that is attractive and responds to and is consistent with the design and context of the neighborhood, builds a sense of pride and ownership among students, teachers, and the community¹."

These five design trends position the schools of today to serve the students of tomorrow. The impact of a facility's design on the occupants of the facility cannot be overlooked. With a well-designed and executed educational facility, students and faculty can communicate and collaborate better, have better attendance, health and better grades. RSMeans from The Gordian Group[®] supplies designers with the construction cost estimating tools they need to determine how to create modern learning spaces within a client's budget. RSMeans data is up-to-date and easily accessible to provide dependable estimates for the latest trends in facility design. The new 2016 data includes additions to safety and security and green unit prices, such as bullet resistant fiberglass panels, reclaimed granite and efficient hazard lighting and warning beacons. This data will help build clear estimates to take your building into the future.

1. http://www.wbdg.org/design/elementary.php

2. http://www.schoolconstructionnews.com/articles/2015/03/3/q-design-encourages-learning-beyond-the-classroom

3. http://blog.lpainc.com/lpa-blog/bid/109751/Five-Trends-in-K-12-School-Design-Everyone-Should-Consider



^{4.} http://www.schoolconstructionnews.com/articles/2015/05/21/shining-light-on-campus-security