



The Growing Influence of LEED Certification in Higher Education

BY DAVID VINSON, PHD

Higher education plays a significant role in guiding society towards a sustainable future. It does so through research and community engagement, and by cultivating the knowledge, skills, and attributes of students that will empower a new generation to address emergent ecological and climate crises around the world. Education provides students with the tools to take responsibility for their lifestyles, nurturing a healthy human-nature relationship.

continued...



We're Still Listening.



Water professionals know that swimmers demand clear and clean water. That's why we continue to work hard to make your job easier. Make chlorination easy with the **ACF Series** Calcium Hypochlorite Feeders.

Clarify with Vantage Poly-A Clarifying Tablets. This unique and powerful tablet water clarifier is not just to clear up cloudy water after a long weekend. As a maintenance product, it works with your filtration system to remove organic and inorganic compounds to prevent dull and cloudy water.

SANITIZE with the **ACF Series** Calcium Hypochlorite Tablet Feeders

- ⌘ Safer than liquid systems
- ⌘ Runs "Clean" - Less Maintenance!
- ⌘ Simple, Efficient, and Durable
- ⌘ Systems available for ANY size pool
- ⌘ NSF/ANSI Standard 50 Certified

CLARIFY with the **VPF-20** Poly-A Tablet Feeder

- ⌘ Unique tablet clarifier
- ⌘ Easier than liquid systems
- ⌘ Removes organic and inorganic compounds
- ⌘ Increases filter effectiveness
- ⌘ Proven cryptosporidium removal



AllChem Performance Products, Inc.
Phone: 352.378.9696
FAX: 866.343.1216
email: vantage@allchem.com
www.vantagewatercare.com

VANTAGE®

Copyright 2015

VANTAGE is a registered trademark of AllChem Performance Products, Inc.

INTERIOR/EXTERIOR ENTRY MATS

**Deliver a message of school spirit
with beautiful logo mats.**

Make a great first impression on visitors, students, faculty and parents.



Across the country, universities have recognized the adverse effects of former practices, subsequently overhauling their curriculum, research, estate management, and community engagement to create a more sustainability-directed campus culture. Campus sustainability is no longer deemed a luxury but rather a core institutional value, one that reaches across all domains of campus life.

The built environment has a profound impact on our natural environment. In the U.S., buildings account for 39 percent of carbon dioxide emissions and 71 percent of total electricity consumption. With roughly 240,000 buildings spread across public and private universities—those spread across more than 4,300 higher education institutions—higher education benefits from making green building a central element of sustainability planning. Central to campus sustainability are the continued efforts to design and construct LEED-certified buildings, those which prioritize six key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, indoor environmental quality, and innovation in design. As the nationally accepted benchmark for the design, construction, and maintenance of high-performance green buildings, LEED provides building owners and operators the necessary tools to have an immediate and measurable impact on their buildings' performance.

Moreover, the social and economic benefits of LEED certification are many. For instance, certification shows the community that the university is serious about adopting environmentally responsible building practices. This not only enhances the university's reputation with the public, but it also serves as a vital recruitment and retention tool for students, staff, and faculty alike. There are also numerous financial benefits to LEED certification. According to the U.S. Green Building Council (USGBC), LEED buildings may qualify for a host of incentives, including tax rebates; thousands of buildings save institutions money, using less energy and reducing maintenance costs by nearly 20 percent. Outside of higher education, the USGBC reports that 87 percent of companies which adopted LEED retrofits experienced higher productivity, 81 percent saw better retention rates, and 75 percent reported better employee health. Also, 79 percent of company employees say they would choose a job in an LEED-certified building versus an uncertified one. The same benefits extend to higher education—imagine, for example, the impact of LEED buildings on boosting the desirability and occupancy of student living spaces, classrooms, libraries, and administrative workspaces, among many others.

LEED-Certified Recreation and Wellness Facilities

An ongoing shift in campus-based culture, one set in motion most of all by the desires and expectations of the student body, is located at the intersection of sustainability and recreation and wellness facilities. Students recognize, perhaps inherently, the reciprocal relationship between notions of wellness and

continued...

pupnmag.com



With this much on the line, accuracy matters



Regulatory compliance

The KMC AFMS is installed in compliance with ASHRAE Standard 111 to deliver superior accuracy performance through embedded fault detection and diagnostics. If accuracy begins to drift, recalibration can be accomplished automatically in the field. To date, 13 states have adopted ASHRAE Standard 189.1 as a standard for building design, operation, and maintenance. This highlights the importance of selecting a reliable, durable outside



Lower maintenance required

Other airflow measurement solutions require periodic cleaning to ensure accurate readings, increasing demands on your facility staff (FTE). The KMC AFMS uses sensors and mounting locations that are resilient to airborne particulate and debris, resulting in virtually zero annual maintenance.

Best solution on the market

	Pitot Tube / Duct Array	Thermal Dispersion	Conditioned Orifice	Characterized Airflow
Suitable for all equipment with mixing box	●	●	●	●
Resilient to environment and pollutants	●	●	●	●
Not affected by ductwork geometry	●	●	●	●
Accurate at low velocity	●	●	●	●
Measurement/performance diagnostics	●	●	●	●

● = Yes ● = No ● = Application Dependencies



Scan to Learn More!



LEED-certified recreation and wellness facilities adopt an ethos that can be summarized as “healthy buildings, healthy bodies.” Central to such facilities are green features, energy-saving lighting fixtures that can be adjusted based on the availability of natural light, and heating and air conditioning units that are run on low-energy usage.

sustainability. LEED-certified recreation and wellness facilities accentuate an institution’s commitment to health and wellness, just as they satisfy student concerns about sustainability and climate change. Students care deeply about optimizing their physical and mental health, and their awareness of the dangers of climate change are as heightened as ever. Research shows that students view recreation and wellness facilities as communal spaces, as those which nurture a sense of connection and belonging. These are facilities that are integral to student life, and LEED certification only strengthens students’ sense of togetherness and the feeling of shared values. Studies also persuasively demonstrate the correlation between improved well-being and student achievement in the classroom. LEED-certified learning spaces be a game changer in terms of enhancing student achievement and happiness.

LEED-certified recreation and wellness facilities adopt an ethos that can be summarized as “healthy buildings, healthy bodies.” Central to such facilities are green features, energy-saving lighting fixtures that can be adjusted based on the availability of natural light, and heating and air conditioning units that are run on low-energy usage. The installation

of low-flow plumbing systems and waterless urinals further reduces water consumption. Other eco-friendly features may include the use of reclaimed lumber and the incorporation of new technology like biometric scanners, those which cut down paper waste and generate utility savings. Irrigation needs of facilities are frequently met through 100 percent recycled water. For instance, numerous LEED-certified facilities include a pool discharge and on-site greywater system for collecting and treating water for landscape irrigation. Displacement ventilation systems, LED lighting, and photovoltaics offset building energy consumption and energy cost. A common practice in certified facilities also includes robust recycling policies for cardboard, aluminum, plastic bottles, light bulbs, paper, batteries, lost cell phones, even eyeglasses found on site.

Procedures for Earning LEED Certification

While LEED certification is a widely known, internationally recognized sustainable building certification, it is useful to revisit what the acronym stands for: Leadership in Energy and Environmental Design. Certification involves a rating system for the construction, design, maintenance, and operations of environmentally responsible buildings. Projects align with several certification pathways: Building Design and Construction (BD&C), Operations and Maintenance (O&M), Interior Design and Construction (ID&C), in addition to Homes and Neighborhood Development (ND). LEED certification works on a points-based system. The higher the score, the more sustainable the building—and therefore, the higher level of certification. Each category has its own rating system. For example, the O&M certification includes points for location and transportation (alternative transportation), sustainable sites (rainwater management, light pollution reduction, etc.), water efficiency (indoor water use reduction, water metering, etc.), energy and atmosphere (minimum energy performance), materials and resources (ongoing purchasing and waste policy, solid waste management, etc.), indoor environmental quality (minimum indoor air quality performance), innovation (LEED Accredited Professional), and Regional Priority (schools, data centers, and so on).

continued...

Custom Branding

At LaptopsAnytime™, we recognize that the success and excitement of your new kiosk is based on showcasing the best of your school's distinctive branding. Our seasoned pros will design and produce custom

graphics for you. The idea behind the graphics is to help promote the kiosk, and the laptop/charger initiative underlying it. Build enthusiasm for using the service at the same time as promoting your brand.



Self-Service Dispensing Kiosks

Repair Depot - Long/Short Term



OVER 6 MILLION 6,000,000
ANNUAL CHECKOUTS AND GROWING

Powered By  **LAPTOPSANYTIME™**
Automated Checkout Kiosks
1-877-836-3727 • LaptopsAnytime.com



Safety & Performance



COMBINED FAUCET & EYEWASH SAVES SPACE

Bradley's new combined faucet and Halo® eyewash is a space saver for any laboratory environment. Use the faucet for everyday washing and activate the built-in eyewash when needed. The patented design ensures faucet turns off as it moves out of the way — keeping water off the countertops.

Emergency safety solutions brought to life.

To learn more please visit
bradleycorp.com/halo-faucet-eyewash



A WATTS Brand

The four LEED certification levels are Certified (40-49 points), Silver (50-59 points), Gold (60-79 points), and Platinum (80 or more points). Despite the challenges, universities are achieving Platinum certification. Consider, for instance, Columbia University's sustainable design and overall project plan for its 17-acre Manhattanville campus. Columbia earned Platinum status for Neighborhood Development, the first certification of its kind in New York City. Columbia is also home to over 15 Gold-certified LEED buildings. At Georgetown, one of its residential buildings—located a few blocks from the U.S. Capitol and steps away from Georgetown Law and the School of Continuing Studies—was the first at the university to achieve Platinum status. At the University of Miami, the Phillip and Patricia Frost School of Music achieved Platinum certification with a remarkable array of sustainable features: modulated electrochromic glazing on windows that reduce glass and heat; mold and stain-resistant framing materials for air-quality protection; light and heat sensors with override capabilities; active-chilled-beam, energy-efficient air conditioning technology; rooftop photovoltaic panels and rainwater harvesting cisterns that dramatically reduce water and electricity usage; smart glass that can be electronically tinted or cleared to optimize daylight; solar energy; and finally, anti-smog coating on facades, which help to clean the air and make exterior surfaces easier to clean over time.

With an increasingly competitive higher education market, campus-based environmental initiatives remain a major factor in students' enrollment decisions. As reported by the College Hopes & Worries Survey Report, nearly 70 percent of 10,000 Princeton Review respondents said that having "a way to compare colleges based on their commitment to environmental issues" would contribute to their decision to apply. Higher education has taken note, and the LEED revolution is well underway.



ABOUT THE AUTHOR: David Vinson, PUPN staff writer, has a PhD in English with specializations in transatlantic literature and cultural studies. He is a committed scholar, teacher, husband, and dad. If you ever meet David, avoid the subject of soccer. His fandom borders on the truly obnoxious.