

The Financial Case for High-Performance Schools

In an era marked by growing environmental consciousness and a pressing need to address climate change, the imperative for high-performance design in school facilities projects has become increasingly apparent. Beyond mere compliance with existing building codes, school districts should proactively prioritize high-performance design for several compelling financial reasons.

HEALTH & WELLNESS

First and foremost, high-performance design offers tangible benefits to the health and wellness of students and staff. It goes beyond sustainable design to touch on the human experience within the built environment as well as carbon reduction strategies. The core tenants of high performance are:

Climate-Aligned

Resilient

Sustainable

- Health
- Equity
- Safety and Security
- Energy Efficiency

that high-performance buildings with features such as ample natural light, improved air quality, and access to outdoor spaces contribute to enhanced concentration, productivity, and overall well-being which ultimately provide financial gains in increased attendance and academic performance and reduced overall lifecycle costs.

By prioritizing high-performance design principles, school districts can create learning environments that foster better academic performance and promote the physical and mental health of their communities. According to data from the nonprofit Collaborative for High Performance Schools (CHPS), classrooms that exemplify design attributes that provide physiological benefits such as the need for change (comfortable variations in light, air, temperature, etc.), the ability to act on the environment, meaningful stimuli as well as places of refuge and positive views to the outside have measurable impact on learning outcomes which translates into increased graduation rates and as previously mentioned, increased attendance. By moving an average student from the "worst" to "best" classroom by these measures, the impact was 0.65 increase in grade point average.

As you can see, these tenants go beyond biophilic and sustainable

design best practices and consider classroom design and layout

and collaborative learning. Research consistently demonstrates



Moreover, high-performance design strategies prioritize lifecycle costs over first costs which result in long-term operational energy and cost savings. Buildings designed with energy-efficient technologies, renewable energy sources, and smart systems for monitoring and controlling energy usage can significantly reduce utility expenses over time. These savings not only benefit school budgets but also free up resources that can be redirected towards educational programs and initiatives, ultimately enhancing the overall quality of education provided. In October 2003, the Los Angeles Unified School District (the nation's second largest school district) adopted a board resolution directing the district to certify all building projects to be certified under the CHPS system a guideline for high-performance school design that factors of sustainable elements as well as human health and wellness. Since then, because of the high-performance measures tailored to each project to meet the CHPS program, each project has saved tens of thousands in energy and water utility and operations costs.

THE SURGE IN UP-FRONT SAVINGS

High-performance design practices frequently offer upfront cost savings through various grant programs and incentives. Federal, state, and local governments, as well as private organizations, increasingly provide financial support and incentives for projects that prioritize high-performance features, such as the: Earth Day Network Grant Programs, U.S. Green Building Council (USGBC) Excellence in Green Building Curriculum Incentive Grants, the USGBC Green Building Research Fund, BP's A+ for Energy Grants, the PG&E Savings by Design and Solar School Bright Ideas Grant, and EPA Environmental Education Grants, and the Inflation Reduction Act (IRA) just to name a few. These grants can offset initial construction costs, making high-performance design more financially feasible for school districts. By leveraging available funding opportunities, districts can invest in environmentally responsible infrastructure without placing undue strain on their budgets.

BEING AHEAD OF THE COMPLIANCE CURVE

Embracing high-performance design puts school districts ahead of evolving building codes and nebulous regulatory requirements. As cities, states, and federal agencies continue to tighten regulations and promote environmentally friendly practices, schools that proactively adopt high-performance design principles will find themselves well-positioned to comply with future mandates. By future-proofing their facilities, districts can avoid costly retrofitting projects down the line and ensure ongoing compliance with emerging standards.

DEMONSTRATE INVESTMENT IN TALENT AND STUDENTS

High-performance schools can serve as beacons of innovation and excellence, attracting top teaching talent and young families to the district. Forward-thinking educators are increasingly drawn to institutions that prioritize environmental stewardship and provide conducive learning environments.



Likewise, families seeking quality education and a healthy, nurturing environment for their children are more likely to gravitate towards districts with high-performance, energy-efficient schools that demonstrate a forward-thinking approach.

It's also crucial to consider the age of much of the existing school infrastructure. With a significant portion of school buildings over 50 years old, many are in dire need of upgrades to meet modern educational standards and address safety concerns. In districts where infrastructure has aged-out, parents with the choice to leave likely will for nearby districts that provide newer, cleaner, healthier learning environments. Investing in high-performance design not only modernizes these facilities but also sends a powerful message to students, parents, and educators that the district prioritizes their well-being and values sustainability. The value district's place on their facilities reflects their value in education and the students, and users of their campus communities. High performance educational environments empower teaching and learning and enable all students, staff, and the communities they serve to thrive. Additionally, communities will support bond funding when the commitment to facilities that empower student success and support community are tangible and visible.

School districts have countless compelling imperatives to go beyond minimum code requirements and prioritize highperformance design in their facilities projects. By doing so, they can reap numerous benefits, including improved health and wellness outcomes, long-term cost savings, access to upfront financial incentives, compliance with future regulations, and enhanced attractiveness to both educators and families. Investing in high-performance design isn't just about constructing buildings; it's about investing in the future of education and ensuring the wellbeing and success of generations to come.



Mary Ruppenthal AIA, LEED AP, DBIA Education Sector Leader Explore more market and design insights at www.hed.design/insights

