



BUILDING BETTER SPACES FOR LEARNING

AN INTERVIEW WITH DEANE EVANS

INTERVIEWER:
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DEANE EVANS THINKS A LOT ABOUT LEARNING THESE DAYS. ACTUALLY, HE'S thinking about the "built environment" in which learning takes place. Evans is research professor and executive director of the Center for Architecture and Building Science Research (CABSR) at NJIT's New Jersey School of Architecture (NJSOA). Under a recent agreement with the New Jersey Schools Construction Corporation (SCC), Evans' center will help the state design high-performance elementary and secondary schools that provide environments physically conducive to educational excellence.

Building better spaces in which to learn is part of the overall mission of Evans and his colleagues. Their goal is to create new knowledge that will help individuals and communities make better-informed decisions concerning the built environment, especially housing and schools. To this mission, Evans brings a wealth of experience from private practice and work with government.

Before coming to NJIT, Evans directed an innovative R&D program focused on housing technology at the U.S. Department of Housing and Urban Development. Previously, he was vice president for research at the American Institute of Architects (AIA), where he collaborated on projects with, among others, the U.S. Department of Energy, the U.S. Environmental Protection Agency, the Federal Emergency Management Agency, the Federal Transit Administration, the National Institute of Building Sciences and the National Science Foundation. Prior to his work for the AIA, he was a principal with Steven Winter Associates, a well-known housing and sustainable design architecture/engineering firm in New York City.

INTERVIEW

Weinstein: Why is the state of New Jersey so concerned with new elementary and secondary schools at this time?

Evans: This is a very special time in New Jersey for school construction. The SCC, under the Educational Facilities and Construction Financing Act, is responsible for financing, designing and constructing all school facilities in the state's 30 special-needs districts, which receive all of their funding for education from the state. The SCC has the same responsibility in districts where the state provides 55 percent or more of the educational budget. The state is responsible for ensuring that education takes place in safe, functional buildings. Consequently, New Jersey will be spending a lot of money over the next decade to construct new schools.

Weinstein: How, exactly, will NJIT be involved in this effort?

Evans: We've established a center at New Jersey School of Architecture that we've named the New Jersey High Performance Schools Information Center. Under our agreement with the SCC, we see it providing unbiased, research-based technical information that can be utilized in the design and construction of schools.

We will be responsible for documenting best practices, both nationally and within the state, pertinent to the planning, design, construction, financing and operation of schools for students pre-K through the twelfth grade. We will also assist the SCC in developing guidelines that can be applied to school construction. By the way, more details about the SCC are available at their Website, www.njscc.com.

Weinstein: That sounds like a tall order. Does your center really have a shot at being a national model?

Evans: Absolutely. There's nothing like the New Jersey High Performance Schools Information Center in the U.S. California has a collaborative effort – primarily driven by utility companies – dedicated to high-performance schools. But their mandate isn't as broad as ours, and it's not university-based. We've also got a unique opportunity because of the more centralized way that the Schools Construction Corporation is structured and does business. Once we figure out the right way to do something, we can implement it quickly and effectively. It's a huge opportunity to influence school design and construction for the better. I think that's what the SCC is looking for and what they expect our center to help them with.

Their goal is to create new knowledge that will help individuals and communities make better-informed decisions concerning the built environment, especially housing and schools.

Weinstein: What funding will the state provide for this effort?

Evans: While we've heard different numbers, I believe that the proposed budget for the school construction project is something on the order of \$7 billion. This includes building that will take place in the special-needs districts as well as in other districts eligible to receive state money to remodel or build schools. The funding formula for districts that are not in the special-needs category makes the state contribution more of a matching grant. Those districts will have to match more than 45 percent of their funding to get the complementary state monies. Keeping this in mind, the estimated budget

to be spent in New Jersey to build new schools will be upwards of \$10 billion to \$12 billion.

Weinstein: Tell us more about how you envision NJIT's role in this program.

Evans: We've been referring to the center as an intelligence-gathering arm in the sense that we'll look at best-practice information from wherever we can get it, rather than trying to reinvent the wheel. Instead of pie-in-the-sky visions of what ought to be, we'll concentrate on finding the best models out there. They could be located in Pennsylvania or Oregon, or in the next town. It won't matter as long as they embody excellence and can be replicated here in New Jersey.

Keep in mind that as our work progresses we will also scour the state to document success stories about new school buildings. That way people can travel inexpensively to a nearby town to see good building practices. We'll know more about what the SCC expects of the center after an advisory board is appointed to work directly with us.

Weinstein: Will the advisory board ask you to research or investigate particular projects?

Evans: Actually, I see our relationship with the board as being collaborative. In essence they will oversee our agenda. But working together to look into what we think will be productive is important.

Weinstein: Now, tell me why you're a cool person to be in charge of this project, and something about your background.

Evans: I'm a registered architect and Fellow of the American Institute of Architects. My current focus is on high-performance, sustainable buildings, particularly housing and schools. I've written two widely used educational guides for architects and their clients, *The Affordable Housing Design Advisor* and *The High Performance School Buildings Resource and Strategy Guide*. The Sustainable Buildings Industry Council published the school guide. The U.S. Department of Housing and Urban Development sponsored and published the design advisor.

Weinstein: How will the work of the new schools information center dovetail with the overall program of the Center for Architecture and Building Science Research?

Evans: Our center has an established track record in research, and the university has superb technical resources. That combination makes NJIT an ideal

place to generate new knowledge and innovation in building performance. We all live and work and go to school in buildings. Unfortunately, most of them fail to achieve the performance levels they're capable of in terms of comfort, efficiency, sustainability and productivity. We're trying to change that through a program of practical, applied research and development. Our goal is to provide real, tangible benefits to building designers, developers and, ultimately, to building occupants throughout New Jersey and across the U.S.

Weinstein: Can you offer some tips about the latest and greatest innovations in school facilities and where we can expect information to come from, at least initially?

Evans: California has developed a great deal of information for architects and engineers about design and construction. We're going to offer similar information, but tailored to the particular needs of stakeholders in New Jersey, including parents, teachers and students – people who may not know the jargon of the trade but still want the best schools they can get.

Weinstein: Including school board members?

Evans: Of course, board members too. The key will be to create information resources that can help all those who have a stake in New Jersey's future to work together to create high-performance schools. And if we do it right, the new knowledge that we create here will be able to help schools in every state.

Weinstein: How do you intend to disseminate the information you gather?

Evans: To start with, we'll have a Website. I've already secured the domain name www.highperformanceschools.org. We'll use it to exchange information with the SCC and with stakeholders across the state. The ultimate goal is to become the first go to resource for information on the best ways to plan, design, finance, construct and operate K-12 schools – within the state and across the country.

This may mean taking on issues that lie beyond what the SCC is willing or able to fund. For instance, suppose a nonprofit foundation is interested in exploring the impact of room color on student performance in elementary schools. We would be able to undertake this research with the understanding that, even though the SCC didn't fund it,



NJSOA FACTS

New Jersey School of Architecture is one of the largest degree-accredited architecture schools in the United States, granting both bachelor's and master's degrees in architecture. NJSOA is the only architecture school in New Jersey offering the bachelor's degree in architecture. It's also a national leader in the integration of computer-aided design with the studio curriculum. Visit NJSOA on the Web at <http://architecture.njit.edu>.

they will be willing to take a serious look at the results. In the end, they may not implement the results but, then again, they might. The important thing is that they'll pay attention to what we find out. This will allow us to expand our research activities into new areas and to substantially leverage the SCC's investment in us. As architects and researchers these kinds of synergies – and what they may mean for improving schools – are both exciting and rewarding. ■