

## case study

University of Connecticut  
School of Business Graduate Learning Center

Why should I consider a flexible infrastructure?



“This was like nothing else I’ve ever worked on. It’s like nothing else this area has ever seen. It really sets the bar for all business schools.” **Bill Clegg**, Principal, Schoenhardt Architecture+Interior Design

“The best schools in the country aren’t sitting around waiting for everybody else to catch up. They’re doing the kinds of things we’re doing to create a differentiated educational experience. And many schools have learned how Pathways products can help.”

**Rich Dino**, Associate Dean for Graduate Programs,  
School of Business, University of Connecticut

# “You’re going to run into things...”

## Objectives



“We wanted to clearly differentiate the educational experience and the education product, our students, coming out of the UConn School of Business.”

Rich Dino, Associate Dean for Graduate Programs, School of Business, University of Connecticut

It was challenge enough that the entire project was fast-track. Four floors of construction, a total of 40,000 sq. ft. of sophisticated space for education and business, in just four months.

To complicate matters, it was a complete renovation of a 40-year-old building, 100 Constitution Plaza in downtown Hartford, Connecticut. As the general contractor put it, “any time you renovate a building that’s forty, fifty years old, you’re going to run into things you didn’t expect.”

Expectations by the client were high. The University of Connecticut is the state’s flagship public university, with a business school ranked the #1 public B-school in New England and consistently ranked as one of the best in the nation. They envisioned a high-tech, experiential learning environment for graduate business studies, a building that would consolidate several

programs at one site, and an advanced learning facility unlike any other in the country.

The Graduate Learning Center would be part college, part research lab, and part working business: the first floor would house a live trading floor where a university partner would conduct real-time stock trades, and students, faculty and traders would interact, explore, and learn together.

To accomplish that vision, a challenging renovation would have to be completed in time to meet an unmovable deadline: the start of the school’s Fall semester.

1 US News & World Report 2005 edition of “America’s Best Graduate Schools”

2 Forbes Magazine, October 12, 2003

# Secrets behind the magic.

## Situation

Just as the general contractor had predicted, unexpected “things” started to happen, even before construction began. Design and planning were delayed by a first-floor tenant who refused to leave as scheduled. “It took weeks, months to get them out, and we couldn’t get in the first floor to take a survey,” says Gerry Dunleavy, Steelcase regional project manager.

“Then, when they finally got in there to start working, the contractor found asbestos. The job was virtually shut down while a crew came in to remove it. Since we weren’t going to get in for at least two or three weeks, and we still had to meet the schedule, I had to order floors, walls, and modular wiring without ever setting foot inside the first floor—the most complex floor of all.”

Every room in the Graduate Learning Center integrates and celebrates technology, but the first floor Financial Accelerator screams it. Entering the space requires a retinal scan to verify entry authorization, both to protect the millions of dollars of technology, and to provide the security required by Securities and Exchange Commission (SEC) regulations for a live trading floor. A dramatic two-story space split by a glass wall, the Financial Accelerator is a business laboratory where students, faculty and business executives work together on real-life business issues. On one side, students and faculty are actively involved in research and study. On the other side of a central glass wall thrives the live trading floor.

The space feels like Wall Street set in a Star Wars movie. A 45’ x 18’ “big board” incorporates live video on flat screens and rear screen projection, constantly streaming real-time news and trading information. A PolyVision Impulse LTX multimedia whiteboard system digitally captures writing.

To support the business of this space, the technology had to be easy to install, manage, and change, which called for Pathways Floors and Wiring and Pathways Technology Wall. But some project team members weren’t aware of the advantages of products that integrate architecture, furniture and technology.

Bill Clegg of Schoenhardt Architecture+Interior Design in nearby Tariffville, CT, the principal designer on the project, says “when Pathways Low-Profile Floor hit the market a couple of years ago, not everyone understood what was going on with the product. People were so used to having a high raised floor that they didn’t think there was any other way to do a raised floor.”



It’s both high-tech and high-purpose, says Dino. We’re not interested in technology for the sake of technology. What it does is enable us to create an outcome, which is to solve real business problems, create new knowledge, and effectively

Rich Dino, Associate Dean for Graduate Programs, School of Business, University of Connecticut

The Constitution Plaza building had been renovated many times in the past, resulting in floors “with so many holes they looked like Swiss cheese,” says Lionell Thompson Jr., project manager for Konover Construction. Holes were filled, then Pathways Low-Profile Floor’s universal supports were placed on the concrete to hold the floor’s triangular steel tiles.

“The biggest question anyone would bring up was, does Low-Profile Floor, a three-inch raised access floor, really have the capacity we need? Under the floor there’s tons of wires down there. And it’s not as though we didn’t have a lot of technology in this building. There was plenty of room; we could have put double the amount of cabling and it still wouldn’t have been an issue.”

“Since it’s only three inches, I can’t think of an application where it can’t be used,” says Clegg. “In the past, if you had a ten—or twelve-inch raised floor, you had problems at restrooms, stair towers, elevator lobbies. What’s nice about a three-inch raised floor is you may have ramps, but they’re not a big deal.”

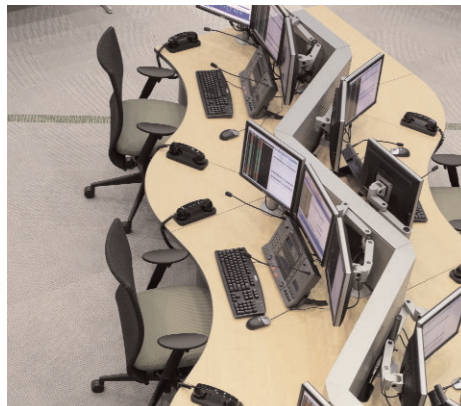


Beneath the floor are miles of power and data cabling, the flexible backbone of the building’s high tech systems. Unlike traditional pipe and wiring systems requiring extensive construction, assembly and installation, Pathways Modular Power and Zone Cabling systems arrive pre-cut and pre-tested, ready for plug “n” play installation. Instead of multiple skilled trades needed for traditional construction, the building’s power and data systems were installed by the furniture dealer, BKM Total Office in East Hartford.

“Other contractors on site were amazed at how fast it went,” says Jerry Slabinski, design project manager at BKM. “Our guys came in and laid the cables on the concrete floor. The flooring guys came in and put down the floor supports and put the floor in. We did floor, data, and electrical for an entire floor of the building in just about a week.”

“Pathways Floors and Wiring saved at least 50% of the time it would take for a traditional power and data installation.”

Atop Low-Profile on the first floor rests an array of trading desks bursting with technology: three to five monitors, two to three computers, plus phones - on each desk. “We needed the capability to run a lot of cables for all that equipment. We went with Pathways Technology Wall for the look, for how sturdy it is, and how much technology it can support,” says Slabinski. Integrated Pathways Ports in Technology Wall include interchangeable modules that provide power, voice and data, and can be located anywhere on the panel.



“It’s a raised floor, but it doesn’t have that hollow sound,” says Dino. “It’s an absolutely outstanding product, and it gave us the ability to lay out and equip the building as we needed to, not just for now but in the future, too.”

# Learning spaces that keep learning.

## Solution

The second through fourth floors also include elaborate technology, closely integrated with the architecture and furniture. Working together they form a flexible learning environment that can quickly respond to changing educational needs. A key to that flexibility is the moveable wall from Steelcase.

"The fact that they're fully integrated with the power and data is really nice," says Clegg. "I like the streamlined, clean detailing, the way you can use glass wherever you feel it's appropriate, side lights or full glass walls, whatever. And the acoustical value of the wall is significant. The teachers would have to just about scream at each other from one side to the other for you to hear it."

Others were not familiar with Steelcase moveable walls. The general contractor and Hartford building inspectors had never seen the product and openly wondered about its stability.



"Arriving on site fully assembled and pre-wired, moveable walls were installed on all four floors of the building in just two weeks. No way we could have done that," says Dunleavy, "with drywall and traditional wiring and cabling."

Gerry Dunleavy, Steelcase  
Regional Project Manager

"So we did an on-site mock-up to show them," recalls Dunleavy. "We had them slam the doors as hard as they could, put all their weight against it, try to make a panel of the wall move. We spent maybe a half-hour, a real hands-on demo. Finally the inspector said, 'I see what you're talking about now. He was happy.'"

Konover Construction's project manager admits that when he first heard about the moveable walls, he was skeptical. "They sounded kind of cheesy to me," Thompson says. "But when I saw the product, and how they installed, the stability — it's really a very good product."

The classrooms also transcend the traditional. Instead of tiered classrooms that slope up from front to back, as most colleges offer today, the Graduate Learning Center takes a different approach: tiered furniture. Four rows of Ellipse tables (also wired for power and data) are set at four different heights. The first row of tables are 28.5" high, with each succeeding row 3" higher. The first two rows have Leap chairs, the back two rows use Leap stools, all with pneumatic height adjustment. This design was less expensive than building tiered floors, and allowed tiered classrooms within low ceiling heights. Plus, there was another unexpected benefit: "Students with wheelchairs aren't limited to designated areas for wheelchair access, usually in the first row of a tiered classroom. Here they can easily fit wheelchairs under classroom tables and sit where they want," says Glen Richardson, executive director for the Tri-Campus School of Business.

The inherent adaptability of the space is tested daily. “What I’m most pleased with in this building is the flexibility of the spaces,” says Richardson. “For example, there are a variety of different break-out rooms. Students meet in teams or small groups, the furniture’s on wheels and they can move it around inside or outside the room. Hallways have places where students can walk up and log on, or study in comfortable lounge chairs.”

“We heard early on from the designers about having these cafe’ tables and stand-up islands that just kind of stick out in the middle of the hallway,” says Dino. “There’s plugs there, and data connections, and of course there’s wireless. They told us, “this is the way people like to get together. You’ll find them standing around these tables, talking, working. And the very first day of classes, people were doing that! They were standing around talking on their cell phones, working on computers, talking in groups. It was amazing.”

## School’s in session.



### Results

Despite the tenant who wouldn’t leave, the asbestos discovery and delay, internal planning that Dino says was often “done on the fly” and resulted in several product and construction changes, plus the usual issues that arise in any project of this scope, the Graduate Learning Center was open as scheduled in August, 2004. “Asbestos, some extras in construction, but not one day extra in the schedule,” says general contractor Thompson.

The impact on the university began from day one. Learning and teaching are richer, more visible, and more vibrant for both faculty and students.

“Prior to the opening,” says Dino, “the Princeton Review ranked us seventh in the nation in terms of facilities. This facility is second to none in the country.”

Attendance at monthly open houses by prospective applicants has more than doubled since the facility opened. Admissions in the fall are expected to rise correspondingly, and the university now has plenty of room for new students.

“Some of the nicest compliments we’ve received,” says Dino, “have come from other businesses, corporate partners or potential partners with the school. They say, this is not just a great academic facility, it’s as good a business facility as anything we’ve seen. The funny part is, they also say, “when we hire your students, who’s going to tell them we don’t have anything like this?”

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#### Product directory

##### **Steelcase**

Pathways® Post and Beam  
I-Line Moveable Walls  
Pathways® Technology Wall  
Pathways® Low-Profile Floor  
Pathways® Modular Power  
Pathways® Zone Cabling

Ellipse® Tables  
Impact™ Desks  
Werndl Flip Top™ Tables by Vecta  
Convene™ Tables  
Werndl Emerge™ Reception Station

Company® Seating  
Jersey® Seating  
Leap® Seating  
Think™ Seating  
Cachet™ Seating  
Metro Rubber Stools  
Bix® Lounge, sectional seating, and benches

PolyVision Impulse™ LTX Multimedia  
PolyVision Whiteboard System  
PolyVision Room Wizard™

#### Credits

##### **University of Connecticut**

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100 Constitution Plaza  
Hartford, Connecticut 06103  
Tel: 860.728.2400  
www.uconn.edu

##### **Schoenhardt Architecture + Interior Design**

Two Tunxis Road Suite 116  
Tariffville, CT 06081  
Tel: 860.658.4496  
www.schoenhardt.com

##### **BKM Total Office**

300 East River Drive  
Hartford, CT 06108  
Tel: 860.528.9981  
www.bkm.com

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