



The Theatre School at DePaul University makes a grand entrance on Fullerton Avenue

By: David Barbour



Left: A view of the building at night, with the Healy stage visible from the street. Above: The interior of the Healy.

ePaul University in Chicago has long had one of the country's more prominent theatre schools, but it also lacked facilities that were commensurate with its high-caliber faculty and student body. The school was founded as the Goodman School of Drama; later, it officially became part of DePaul, which is located in Lincoln Park. The school had to settle for temporary digs (lasting decades) in a disused elementary school and a converted convent adjacent to the DePaul campus. For a program led by a team of respected professionals who oversaw two dozen productions per season, this was a less-than-ideal arrangement, to say the least.

Happily, those days are past. September 2013 saw the

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opening of The Theatre School at DePaul University, which brings performance spaces, rehearsal rooms, classrooms, and costume and scene shops under one stunningly designed roof. "It puts the theatre back in the Theatre School," says John Culbert, dean of the Theatre School.

The building comes with a first-class pedigree: Pelli Clarke Pelli and Cannon Design served as architects, with a team from Schuler Shook—Robert Shook, Joshua Grossman, and Lisa Bernacchi—serving as theatre consultants, and Kirkegaard Associates, led by Joseph W. A. Myers, Brian Corry, and Joanne Chang, providing acoustical consultation services. Schuler Shook planned the two performance spaces, including seating layouts, sightlines, stages, and stage lighting and rigging systems. Kirkegaard Associates provided full acoustical, mechanical noise, and AV/multimedia systems consultation.

The details of The Theatre School at DePaul have been carefully thought through, beginning with its location. Culbert notes that the 165,000-sq. ft. building occupies a footprint that makes it the western gateway to the DePaul campus. Also, it sits on Fullerton Avenue (intersecting with Racine Avenue), a busy major artery. Because the many shows staged at The Theatre School are open to the larger community, Culbert says, "The building serves as a portal, where the public will interact with the university." Indeed, DePaul was drawn to Pelli Clarke Pelli because of its interest in creating a building that facilitated interaction between the university and the surrounding neighborhood.

"And," Culbert adds, "it is a most attractive portal, cleverly conceived to blend in with the overall architectural style of the DePaul campus while providing an inviting face to the outside world." The façade is a series of rectangles in gleaming white Turkish limestone and glass. In the most eye-catching detail, the 100-seat Healy Theatre, a flexible space, has been placed at the top of the building, where it projects outward; its translucent glass façade can reveal the stage inside. This may seem like a counterintuitive idea but it results in a generous gesture; it's as if the building is inviting the world inside to see what it has to offer.

As Blair Kamin noted in *The Chicago Tribune*, "It would be wrong to say that the building merely shelters these activities. Its principal strength is that it showcases them, transforming the design into a kind of performance art, one notably free of such theatre design clichés as blazing marquees or the masks of tragedy and comedy." He added, "In another step that skillfully breaks up the building's mass, a glass-sheathed vertical shaft in the middle of the Racine facade presents a veiled peek at students traversing an articulated steel stair painted a lovely Kodak yellow. Such transparency, which also reveals the ground-floor student lobby and the various scenery shops (complete with welders and flying sparks), has been a hit with passersby. They seem captivated by the celebration of backstage activities and the way it puts these things, typically shoved out of view, onto a public stage." He notes the "vertical slip windows...deliberately arranged in an idiosyncratic rather than a conventional grid, reflecting the energy inside. 'They like the idea of a dynamic, controlled chaos,' Pelli said of DePaul."

For DePaul students, the building is filled with grace notes that place their studies in the historical continuums of DePaul and of theatre history. A wall display features a complete production history at DePaul and the Goodman School of Drama. The balcony rail in the Fullerton Stage reads, "The Theatre School, founded in 1920, in honor of Kenneth Sawyer Goodman." (Goodman, a playwright, died in the influenza epidemic of 1918; his parents funded the Goodman Theatre, and the school, as a tribute to him.) Etched glass throughout the building contains quotes from the likes of Edward Bond, Constantin Stanislavski, and other theatre greats, along with such core values as "spirituality," "creativity," and "respect."

In addition, the Theatre School is eco-efficient. The US Green Building Council has awarded the building LEED Gold status, making it the first performing arts building in Chicago to achieve that level of certification. The key features that earned the status include green roofing to reduce storm water runoff and create additional insulation; water-efficient landscaping and 20%-below-typical water use reduction, optimization of energy performance in HVAC systems; use of recycled construction materials, use of regional materials and construction waste recycling; use of low-emitting materials throughout and indoor air quality management; automated lighting and mechanical systems controls; and multiple design innovations (including exterior wall system development and use of insulating materials). All in all, at a cost of \$73 million, it seems to be a case of money well spent.

As is often the case with such projects, it was a long and winding road to opening day. DePaul first approached Schuler Shook in 2001 to help develop an architectural program for what was then a facility for both the theatre and music schools. Three feasibility studies were conducted between 2005 and 2007 for facilities to be built in the Chicago Loop, a plan that was ultimately discarded. A fifth feasibility study in 2009, for a theatre building on Fullerton, proved decisive. A design competition led to the choice of Pelli Clarke Pelli. (Schuler Shook and Kirkegaard are now at work on a building for DePaul's School of Music, located elsewhere on campus.)

The layout

As everyone who was interviewed for this article notes, the process of integrating so many services and functions into one building was not unlike playing several simultaneous games of Rubik's Cube. Nevertheless, the various spaces



The Fullerton seats 250. "We wanted students to experience the challenge of a thrust stage," says John Culbert.

seem to be optimized in terms of the structure's overall functioning. The ground floor features what is known as the "living room" of the building, featuring a glassenclosed lounge, box office, lobby, and concessions. This floor also contains the 250-seat Fullerton Stage, about which more in a minute.

The second through fifth floors contain all spaces related to costumes, makeup, and props, along with classrooms, lighting labs, new media workshops, and rehearsal spaces. (A large prop storage space remains off site.) In order to make them as useful as possible, the classrooms have been outfitted with enough gear to make them performance-ready; even the first floor lobby has acoustically treated walls and a small lighting grid. "There was a mission to make as many spaces into performance spaces," says Robert Shook, of Schuler Shook. The three main rehearsal spaces are designed to accommodate the dimensions of the school's main theatres, including the 1,325-seat Merle Reskin Theatre, located downtown.

Among these spaces, ten rooms designated as acting

labs feature ETC Smart Bar dimming along with manual curtain rigging and specialty curtains by iWeiss. The facility's light lab features ETC's Net3 networking, 96 Sensor D20E dimmers, 48 ETC Smart Switch DMX-controlled relays, and an ETC Element 250 control console. Five acting labs feature EAW JF59NT loudspeakers; the other five have Renkus-Heinz SG121-2 boxes. Each lab room has a Rane MLM65 mixer for rehearsals and class uses. An Allen & Heath ZED-12FX mixer in a mobile rack can be connected to the in-room system for acting lab workshop performances.

Other design aspects, including wide corridors, open lounges, and rooftop courtyards, were conceived to help create an atmosphere of free interaction among students and teachers. The indoor courtyard brings additional sunlight to an already pleasingly bright interior. Rooftop courtyards provide another pleasant retreat, weather permitting. And just as the vertical shaft of glass on the exterior exposes the building's activities to the street, many rooms are visible to those passing through the



Above: The scene shop has a loading dock and a drawbridge that can open up to allow for the passage of large pieces of scenery.



The building is designed to allow for plenty of sunlight, and to reveal the activities of the school to passersby.

interior corridors. This helps to underline the fundamental concept of theatre as a communal, creative experience, to be shared by artists and audiences alike.

The building's layout posed a number of acoustical issues, notes Joseph Myers. "The fundamental challenge of the building is that it is 8lb of stuff in a 5lb bag," he says, adding that building codes regarding height in the area limited its height. Nevertheless, he says, it came with "an expansive program and a desire for high ceilings, with limited cubic footage.

"Furthermore," he says, "because many of the rooms, such as the scenic shop and acting classes, are longspan, and in order to build it fairly quickly, it was decided that steel [rather than concrete] was the way to go. Working with a steel structure was one of the great challenges of the building; we got through it by collaborating with [structural engineer] Thornton Tomasetti and [mechanical engineer] WMA—who was very careful, when doing computer modeling, that the ductwork fit in all the right places."

Myers notes that the building's many concrete slabs were helpful for low-frequency isolation. He adds, "In cases where loud rooms were stacked over each other, we supplemented them with gypsum board ceilings and tile ceilings. Every classroom is served by fan-powered VAV boxes, and, where possible, the boxes were kept outside the room. When we couldn't avoid this, we had a special treatment placed above the tile ceiling."

The acting labs feature thick hanging packing blankets, which help to muffle any unwanted reverberations. "The client told us, 'Our students are going to be throwing themselves at the walls,'" Myers says. "We needed absorption that people could throw themselves at. Basically, they are quilts, hanging on grommets, that you can take down to make the room more live. The backside of the packing blankets has a vinyl facing; if they want a more reverberant room but want to keep the look of the blankets, they can turn them around. It's a standard product, used in a non-standard way. The credit goes to Schuler Shook, who said, 'Why don't you think about using packing blankets like they have in elevators?'"

Myers says, "We paid a great deal of attention to the acting labs, but also the lobby, scene shop, and circulation areas, making sure they received an appropriate level of treatment. A theatre school scene shop is a teaching space; you need to be sure it isn't an echo chamber, that it doesn't get painfully loud when tools are in use, and that you have some control over the fans sucking air out of the paint shop. When I was walking through the building, someone from the scene shop pulled me aside and said, 'We love the way our space sounds.'"

Joanne Chang, also of Kirkegaard, who specified the sound gear used in the building, notes that the sound lab includes a teacher's station and 12 student stations, each outfitted with a Mac Pro computer. The room is also outfitted with Meyer Sound loudspeakers. Using a MADI setup, she says, "The teacher can route any student's work to the eight-channel loudspeaker system, which surrounds the room, during the sound design class; the student's computer desktop is also routed to the video display in the front of the room, so that everyone can see what is being manipulated while listening."

Fullerton Stage

The 250-seat Fullerton Stage, located on the ground floor, is a thrust space, a choice made to distinguish it from the Merle Reskin downtown and the flexible Healy upstairs. The Fullerton was inspired in part by the Court Theatre, the professional company on the campus of University of Chicago, where Culbert and other members of the faculty frequently work, and which also was an early Schuler Shook project. (Schuler Shook led DePaul faculty on field trips to various thrust stages in the Chicago area.) The Court model was arrived at following six different iterations, notes Shook; one major modification is that the aisles are shorter, allowing for faster stage entrances from the back of the house.

Nevertheless, says Culbert, "We wanted students to experience the challenges of a thrust stage." He adds that, in many cases throughout the buildings, limits have been placed on the performance spaces' technical capabilities, "to teach students how to deal with limitations." It's a wise move, as many students leave lavishly equipped university situations only to find themselves at a disadvantage in real-world production environments.

The seating, supplied by Miami, Florida-based Series Seating, is marked by a black-and-white pattern that is in keeping with the relative austerity of the room. Schuler Shook staggered the seats' size and placement to ensure unobstructed sight lines. The vast majority of the seating is on the orchestra level, with the balcony consisting of a single row. The balcony "allows students and instructors to slip in and check out a scene or a rehearsal," says Shook.

The overhead is accessed by catwalks. The motorized Stage Technologies eChameleon rigging control system, driven by the company's Illusionist console, includes 17 Stage Technologies Big Tow-Lite batten hoists, eight Big Tow mobile point hoists, and two JR Clancy Light Ladder lineshaft hoists, plus eight rope-operated linesets. All of these, and a manually operated variable acoustic curtain system, were provided and installed by Fairview, New Jersey-based iWeiss. Minneapolis-based Staging Concepts created a custom stage trap for the Fullerton, which encompasses adjustable beams and a column support structure that allows for varying elevations of platforms and configurations. The system is 24' x 48' in size. Additional accessible seating platforms were supplied by Germany-based NivoFlex.

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Lighting in the Fullerton includes ETC Paradigm control for the house lights, using the Net3 network system, and an Eos Ti console for the stage. Roughly 375 ETC Sensor dimmers and just under a hundred ETC Smart Switch DMX-controlled relay switches complete the package. The dimming system was supplied by DesignLab Chicago.

The light and sound lock around the Fullerton connects to a pathway leading to the scene, prop, and paint shops, all of which are open to the outside world through windows covered with orange welding shades. The scene shop has a loading dock and drawbridge, on the second floor, that can open up to allow for the passage of larger scenic pieces.

"The Fullerton is surrounded by a 2' concrete wall," says Myers. "It is 2' thick because it bears the load of the trusses that span over it and stiffens the building. We didn't need it acoustically, but we welcomed it. That very stiff box in the middle of the building helps the relatively lighter-weight steel structure around it to borrow stiffness from the shell of the theatre."

He adds, "The curtains on the upper side walls make a subtle change in the room. For example, if you're doing an unamplified musical and you want the actors' voices to ring out more, they store the curtains in the side pockets. In a wordy show, where you want the greatest possible clarity in the text, you can pull the curtains out."

Chang says the loudspeaker system is designed to be flexible, with plenty of connection points. The loudspeaker rig includes Meyer Sound UPQ-1Ps, USW-1Ps, and MM-4XPs, plus EAW UB12se and, for control, a Soundcraft Vi1 console with an additional stagebox that ups the channel count to 64. A Clear-Com intercom system is used, with a Listen Technologies system for hearing assistance.

Healy Theatre

As mentioned earlier, the 100-seat Sondra & Denis Healy



The scenery shop is open to the world thanks to windows with orange welding shades.



The costume shop.

Theatre is located on the fourth floor, 45' above ground level. Because the theatre projects out from the façade, it serves as a sign for the entire façade, especially, as Schuler Shook literature notes, "when the north façade is illuminated and softly glowing at night, like a beacon for The Theatre School." (Another Schuler Shook project in Chicago, Lookingglass Theatre, which is quite famously located in the building that formerly held the city's water works, was influential in the design of the Healy.)

Because the Healy is a flexible space, Staging Concepts designed a flexible seating riser and mezzanine system that can be rearranged into various configurations. "We aspired to create an environment that would provide many specific learning opportunities for our students while inviting others to come into the building to experience the creative work of our students," says Chris Hofmann, director of production. "We wanted our audiences, and even those just passing by the building, to feel the creative energy and get a glimpse into some of the behind-thescenes work that goes on in our day-to-day activities."

The lighting system in the Healy includes ETC Paradigm control for house lights and ETC Net3 networking, with show lighting handled by an ETC Ion 1500 console. Some 286 ETC Sensor dimmers and 96 Smart Switch DMXcontrolled relays are included. The manual curtain rigging and specialty curtains are by iWeiss.

Curtains are used to tune the room for different purposes, along with acoustical clouds and treatments, all installed by iWeiss. "They can be set up in different ways to control reverberations and avoid flutter," says Myers. However, he adds, "We purposely did not take the room down to the ideal level of reverberation. If all the fixed finishes took it to the perfect condition and then curtains were added for a production, the room would be too dead.



A makeup class in action.

We put in enough fixed treatments so that it is controllable, although it sounds best when the curtains are used."

Myers adds that the curtains are far more important in the Healy. "In the Fullerton, the room is stable except for two upper side wall curtains that nudge it in one direction or another. Because the Healy can be set up in almost any way, they depend on the curtains."

Myers calls the Healy "one of the great and fun challenges" of the entire project. "It's got this glass wall looking out over Fullerton Avenue, which is not just a street but an artery. It has an outer pane of glass that is the full wall of the building, and behind it is the necessary structure, then the inner pane of glass." This creates "a deep airspace, which is used when cleaning the glass, and also gives isolation from low-frequency noise, like trucks."

Chang notes that the sound system in the Healy, used mostly for effects, features more Meyer boxes plus QSC CX404 amps, dbx 2215 and 166XL effects units, Meyer Sound Galileo 408 DSP, and a Soundcraft GB4, giving students the opportunity to work on an analog console. Qlab is used throughout the building to play back sound effects. Again, Clear-Com provided the intercom and Listen Technologies handles hearing assistance. A Figaro system can provide closed captions.

"The success of the building is due to the diligence of the faculty and staff throughout the planning process," Shook says. Myers adds, "They were clear about what mattered to them. They were good about listening to our descriptions of what they could have—and the right place to stop. Sometimes you come across users who have been dealing with substandard spaces for so long that all they can imagine is their substandard space, but bigger. A good building is a sign of a good client, and they were a really lovely client."