

Preservation Online

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Preservation 101 : *Inside the country's only high school with a preservation-based curriculum*

Story by Tricia Vita / Nov. 5, 2004

This fall, 47 ninth graders majoring in "pres arts" at the [Brooklyn High School of the Arts](#) studied plans from the Historical American Buildings Survey, made elevation drawings, and completed 3-D building models.

"We've just started a timeline of buildings throughout history, beginning with Stonehenge and the pyramids of Giza," says Elizabeth McTigue, a structural engineer who teaches in Brooklyn High School of the Arts in New York City. "I want them to start thinking about what inventions allowed people to move out of caves and make buildings."

The public school, a joint effort of the city's board of education and the New Jersey Institute of Technology (NJIT), is the nation's first high school to offer a preservation-based academic and vocational curriculum.

All students, regardless of major, study the academic-strand of the preservation arts curriculum. As the school's Web site explains: "When you are studying technology and transportation in history, your 'benchmark' would be the Brooklyn Bridge. In English, you might learn about all the poetry that the bridge has inspired and your science classes might show you problems with bedrock and sand under the bridge's piers. In math you might study the distance the bridge spans or its weight capacity."

In 1997, the World Monuments Fund enlisted Kate Burns Ottavino, NJIT's director of preservation technology, to create and oversee the project. When the Brooklyn school first opened four years ago with an enrollment of 300 (today it has close to 800), students had no idea what the preservation arts were, so they couldn't major in it.

"Preservation didn't emerge until the late 1960s as an industry in the U.S. It's obviously young," says Ottavino, who got input from preservation arts educators in France through a teacher exchange. "In Europe, it's 400 years old."



For his summer internship, Kenny Rivera, a student at the Brooklyn High School of the Arts, helped restore the New York Botanical Gardens' Fountain of Life. (Brooklyn High School for the Arts)



(Brooklyn High School of the Arts)

Over the past five years, the World Monuments Fund has put about half a million dollars into the school's curriculum development. "We're deeply committed to doing something to solve the problem of losing skilled artisans in America that can work with architecturally significant building fabric," says Bonnie Burnham, fund president. "It was Kate Ottavino's idea that a program of this nature needed to be rooted in the school system, and not just site- and project-based, the way a lot of preservation craftsmen training programs have been developed."

Commissioned as a national model, the Brooklyn program has drawn queries from schools in Newburgh and Rochester, N.Y., as well as Cleveland, Ohio, and Charleston, S.C. "We're looking at New Lebanon, N.Y., with the Shaker Village, which is on our current World Monuments Watch List, as a possible second venue," Burnham says. "Our intention is now to try to see this in other schools, initially in the state of New York, where it's been accredited, and eventually in other states."

The class of 2008 will be the first in which preservation majors receive a career-endorsed technical diploma, Ottavino notes. Their hands-on knowledge comes from summer internships.

Last summer Kenny Rivera, a senior at the school, helped restore the New York Botanical Gardens' Fountain of Life. "You know how bronze turns a greenish color? It was melding onto the stone," Rivera says. "You make a mixture of Fuller's earth, ammonia, and lime. You put it on, and it absorbs all of the pigments out of the stone."

Ottavino's family-owned stone restoration company, founded in 1913, is among more than 30 craftsmen studios, architecture firms and city agencies that provide internships for which the students are paid through a federal jobs program.

"I like the jobs they offered me," says Jessica Alonso, an 11th grader who last summer got hands-on experience with wiring and product design at Aurora Lampworks, a Brooklyn-based company that restores and replicates antique lighting fixtures.

"We try to give the interns a real tasting of all the different activities you do as a business," says Aurora's president Dawn Ladd. "Some are glamorous, like working on-site at the Federal Reserve or picking up amazing chandeliers from a church on the Upper East Side. Others are not, like showing up at our shop meetings or sweeping the floor. But if they're inclined or interested, they learn to sauter or weld as well as take things apart and put them together again."

In New York City, where eighth graders are required to apply to a dozen high schools, Robert Finley, principal of the Brooklyn high school, expects several hundred students to "audition" on Dec. 4 and 5 for the 50 increasingly coveted slots in the preservation arts. Candidates are asked to bring in a portfolio of artwork and original writing that addresses the theme of historic preservation. Finley says the preservation arts have given a "competitive spin" to his dream of creating a school for Brooklyn similar to Manhattan's prestigious LaGuardia High School of Art and Music and Performing Arts.

"Parents see this as an opportunity for their kids for scholarships, internships and career options that otherwise would not be available," Finley says. As for the kids, Finley likes to think they are going back into their communities and talking about this "so that buildings that might otherwise be perceived by people as lifeless or of no value are suddenly going to take on new dimensions."

That's just what happened to Timothy Anderson, a student who plans to apply to architecture school. He says he now takes an interest in the buildings he sees every day, from the office tower built atop Brooklyn's Atlantic Terminal by Swanke Hayden Connell, the firm where he interned, to the 19th-century row houses on his own street. "One day I went down to the Hall of Records. They have pictures of all the houses from the tax records in 1932, and I was able to find our house," Anderson says. "It was built in 1899 of bricks and mortar. We have the original stained-glass windows on the top floor."

For more information, visit <http://brooklynhsarts.org/index.jsp>

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