



The curved acoustical shell of Duke Ellington School of the Performing Arts' new performance space is clearly visible in this cutaway view, as are the orchestra pit, balcony and fly tower. Photo Credit: cox graae + spack architects

New Performance Spaces for Older Schools

By Kate Dydak and Carrie Rollman

Schools view performing arts spaces in many different ways. They can be places to gather as a school community, places to give students confidence and teach them about presenting themselves, and places to put on major artistic productions and to prepare students for performance-industry careers. Given the spectrum of needs a performing arts space may serve, there are some key questions that must be answered through the planning and design process.

First, a school must define the primary need for the space. What is it the school doesn't have? What does it need, and what are the key drivers for this need?

Consider three performing arts projects at different high schools in Washington, D.C., as examples of developing a space to fit the needs of students, community and school.

Duke Ellington

The Duke Ellington School of the Performing Arts is a public high school whose mission is to nurture and inspire passion for arts and learning. As a result of the school's mission, many graduates intend to pursue careers in the performing arts industry. While the school's program was excellent, the facilities to support the program were not up to par. As part of the D.C. Public Schools (DCPS) modernization program, the school was selected to undergo a major campus modernization, including a major emphasis on performance spaces.

Woodrow Wilson

Woodrow Wilson High School is another public school that was transformed as part of the DCPS modernization program. While the emphasis was on providing a 21st century campus that served the community, the renewed vision for the school also identified a need for an 850-seat space that could support the school's performing arts programs while enhancing community interactions. "When you build performance spaces, you build community," said Alex Wilson, director of academic development at the school.

Georgetown Visitation Preparatory

Georgetown Visitation Preparatory School is a 490-student, all-girls independent high school affiliated with the Roman Catholic Church. Due to a large fire in 1993, the school lost Founder's Hall and with it the Odeon, its community gathering space. Core to its mission, the school was in need of a space to hold mass, full-campus

assemblies, and theater and music performances.

Creating Space

Once a school identifies the key drivers for a performing arts project, it must identify what space is currently available. If the driver of the project is specific to providing a world-class performing arts venue and funding is available, a school shouldn't limit itself to the parameters of existing spaces. Duke Ellington's grand classical-revival-style, 18th century front and back facades are historic landmarks. However, the design team assumed the facades as their only fixed parameter, demolishing the rest of the facility and rebuilding a new one from the ground up with a new theater as the center of campus.

If, however, the project is driven by a need for a large and flexible space to gather and perform and/or school resources are limited, a school should consider taking greater advantage of existing large spaces on campus. The constraints of the existing space will define the extent of modifications possible to the overall location, shape and size of the theater. However, if well designed, a retrofit can provide significant functionality. At Woodrow Wilson, the campus master plan team consolidated athletics on one side of campus and performance spaces on the other. The new auditorium could then be built in an existing gymnasium, which provided a large space for a new theater while maintaining the existing foundations.

Performance Project Details

Once space is found, there are a number of important design elements to address in any performance-space project. Most theater spaces have angled or "raked" floors that improve sightlines to the stage. While straightforward to implement in new spaces, both Wilson's and Georgetown Visitation's renovation projects dug into the existing slab at the front of the house to provide this design feature. However, if the space is going to provide for a wider range of needs including an activity space, a flat floor may be more appropriate.

Balcony and aisle configurations are generally determined by seating capacity, ceiling heights and egress needs. While most theaters are designed with prime seating in the center, Georgetown Visitation's center aisle allows mass to proceed smoothly. Having multiple sections of seating also makes spaces more versatile. In Duke Ellington's and Wilson's larger venues, closing the balcony or rear inclined seating area can help young performers engage with smaller audiences.

Theater spaces such as the one at Duke Ellington are designed without windows to create blackouts and other lighting effects. For an assembly space, however,

natural lighting can be a welcome amenity. Georgetown Visitation's space integrates a dramatic, east-facing, semi-circular window, and Wilson's theater includes small windows along the sidewalls. While these windows are not ideal for matinee performances and require blackout coverings, they create a more flexible and welcoming environment.

Schools have come up with creative solutions for orchestra placement during their musicals. While the theater standard is Duke Ellington's under-stage orchestra pit, there are multiple options for schools with smaller budgets, belowground site constraints or desires for a more flexible use of space. Wilson has flat space in front of the stage that can be expanded by removing the first rows of seats, while Georgetown Visitation seats its orchestra on stage.

Specific Challenges

The technical elements of a theater space can pose unique challenges. Catwalks and automatic rigging systems allow student access to lighting instruments, but can be cost-prohibitive. Fly lofts are rare due to cost, height regulations and aesthetic concerns, but given the focus on preparing graduates for jobs in fly-loft equipped venues, Duke Ellington's space will include one.

Whether your school needs a world-class theater for partnerships with a venue like the Kennedy Center or simply a space to bring the school community together, thinking clearly through your unique design needs for performing arts will help your school make the best of its budget, space and program goals.

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